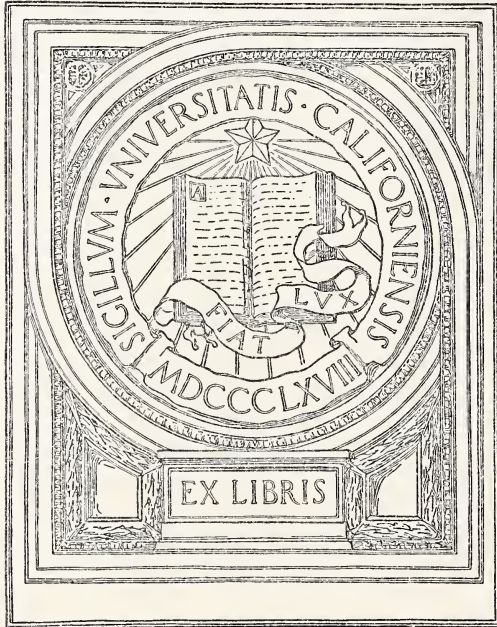




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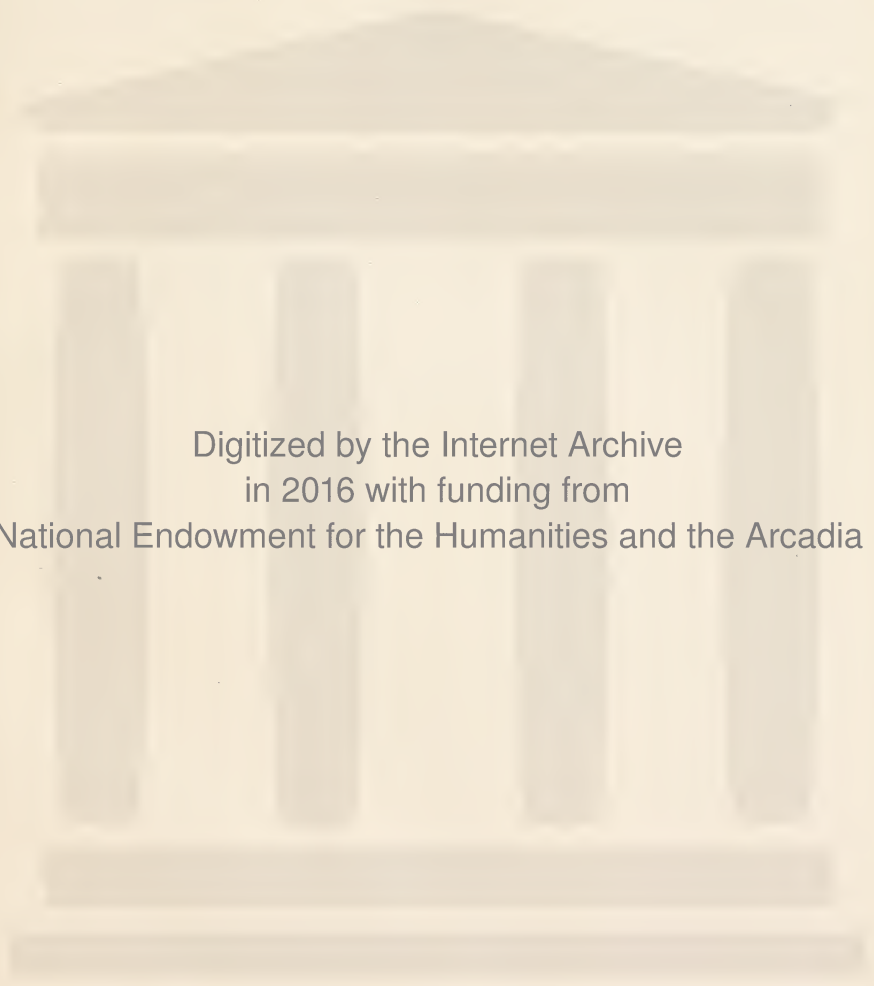


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Articles are, in many instances, listed in this Index under more than one head. All important business items of the annual meeting, as recorded in the August and September Supplements will be found under the heading "Transactions of the House of Delegates." Reports of County Societies and local organizations within their bounds, as well as those of State and National medical organizations, will be found under "Societies." Brief items from current medical literature are indexed under "Current Literature." The abbreviations are as follows: (O) Original Articles; (E) Editorials; (C) Correspondence.

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## THE EVOLUTION OF MODERN LIFE AND ITS EFFECTS UPON TYPES OF DISEASE.\*

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At the March meeting of this society a paper was read by Mr. Frederick A. Finkledey, formerly instructor in Physical Education in the Camden City schools, relating to "The Physical Training of Our Youth and Its Importance to the Child and the Community." It was an excellent exposition, both historical and practical, of the value of physical education to humanity. It was an able paper written from the viewpoint of the German and the enthusiastic instructor in this branch of education and with the possible exception of some historical deductions, we would endorse it in toto. From the standpoint of the physician, however, much different and broader conclusions must necessarily be reached regarding the factors which are most prominent in the promotion and preservation of the health of the child, and we shall touch upon this phase of the problem in the present paper as it most vitally concerns the status of the individual after attaining maturity.

From "the time when the memory of man runneth not to the contrary," all races and nations have recognized the principle of "mens sana in corpore sano," and, so far as history records, the most essential consideration on the part of all has been the

cultivation of health, strength and beauty. In one nation, the actuating motive was prowess in battle, which was gained only by feats of strength. In another it was physical superiority along lines of national athletics and which in the case of the Greeks promoted mental attainments far in advance of those less carefully trained in respect to their bodies. Others, again, assiduously instructed their youths for the sake of their own health and, in doing so, laid a secure foundation for robustness and stability on the part of future generations. History also reveals a very curious relationship existing between the cultivation of the physical and the mental attributes and the place occupied by the nation among those of the world. The higher the degree of physical development and the more advanced the intellectual attainments, the greater the enlightenment of the nation and hence the higher its station among the world powers. On the other hand, when the physical health was neglected or carried to extremes, mentality suffered a decline, becoming of an inferior and very frequently of a sensual type and the people sank low in the scale of nations. There were three reasons for this fact and, as they are still potent and will always be, it is well to examine into them. Of practically equal importance, one can scarcely be placed above another, so their consideration is without regard to their relative significance, it being recognized that each nation or individual must determine through its or his own actions and mode of life, the degree to which each influence will change or alter them.

The first reason for racial or national superiority or inferiority may be said to exist in the environments. The character of the country in which the people live is

\*Read before the Camden City Medical Society, May 5, 1908.

most potent in moulding them. If it be rugged and mountainous the inhabitants will be found to partake of the same physical qualities. Nature demands harmony between her various elements and when a given class of men occupy and develop a certain portion of country, they assume unconsciously many of its characteristics and we find the rough and ready men in the rough and mountainous parts of the land, following occupations thoroughly in keeping with the physical features of the country. All animal life has certain characteristics in common, but no one stands out more clearly than that of the proneness to seek and occupy regions and quarters that are in harmony with the disposition. Some men are born with a desire and temperament for the rough, wild and primitive modes of life and habitations, and these will seek out the mountains and deserts which alone fulfil the longings of their own nature. Others prefer the urban life with its artificial attractions and seem to find in it the same degree of happiness and contentment that the former does in the wilds. On the other hand, nature herself engenders in her denizens, human or otherwise, qualities in thorough harmony with her own moods and topography. Many through stress of circumstances live in regions totally unlike their natal country and ere long are found to have appropriated the general features of the surrounding community until they may be indistinguishable from the aborigines or natives of that part. We commonly refer to them as having become acclimated which is simply saying that they have succumbed to their environment and have been influenced by it to change their whole manner of life. Their innate characteristics have either temporarily or permanently been altered or changed by natural means or methods and they have become a different class and perhaps race of people.

Of the direct influences concerned in this change, there are probably none more potent than temperature, climate and altitude. The discussion of these various factors is in a measure superfluous, as every one is familiar with the characteristics of the communities which are constantly subjected to them. However, they are of especial importance to us as medical men because of their influence upon disease, either primarily or secondarily. Part of our province is the determination of the region in which a certain invalid may or must reside and to properly select such, necessitates a familiarity with climate and climatic conditions and

their effects upon disease. We know full well that certain maladies are more easily controlled in certain atmospheres, temperatures or altitudes and, while we also recognize exceptions to all rules, we may quite closely approximate that which will prove beneficial, when familiar with such relationships. Furthermore, we must not lose sight of the changes effected in the patient himself and, through him, in the disease, but of this more will be said directly.

A second factor in the determination of racial and national change is that of physical health. The history of nations has always indicated three stages in their existence, viz., their formative or developmental stage or period, their period of full growth and power and their period of decay or decline. Careful analysis of these various stages has also shown that the one essential to advancement and development has been physical superiority, or at least the conservation of the physical powers, and the proper direction of these same in the channels of progress. There is an intimate relationship between physical and mental superiority or its opposite—degeneracy, hence it will be readily understood that with proper attention to the development of the individual body, the entire race will be advanced along the lines of vigor, virility and forcefulness and that such progress will engender mental and intellectual progression. Such a state, however, is not ordinarily tenable for longer than a given period of time and this period marks the age of full growth and enjoyment of the fruits of the labor during the developmental age. Full fruition has been attained, ease and luxury have crept in and relaxation to the full enjoyment of these has occurred. This then continues for a greater or lesser length of time, according to what is necessary to produce satiety and then appeal is made to the sensual. The higher or more intellectual forms of entertainment are replaced by the suggestive or openly sensual and the period of decadence begins. There is nothing to act as a spur or stimulus toward the higher plane of civilization—the enjoyment of Shakespearian plays is replaced by the desire or demand for the drama or the so-called “character play,” the scientific or philosophic lecture is forsaken for the moving picture show, the instructive and healthy character portrayal of Dickens and his confrères do not compare in intensity with the more modern so-called historical or problematical novel or detective series, and are accordingly eschewed—an indication of the



lowered or satiated taste for pleasure with all of which the physical deterioration goes hand in hand. In his paper, Mr. Finkledey cited the results of the Franco-Prussian war as indicating the physical superiority of the Germans accomplished by the labors and studies of F. L. John, a Prussian school-master, but he disregarded the antithesis to his argument when he failed to mention the very great physical inferiority of the French at that period. That nation was weakened by debauchery, effeminacy and lechery following the downfall of Napoleon and continuing through the reigns of Louis XVIII., Charles X., Louis Philippe, The Republic and Napoleon III. of the Second Empire, and when the war with Germany arose, as come it must, there was but a debilitated and demoralized army and people to meet the now physically superior legions of the Germans. The possession of the physical and mental vigor on the one side and their preparedness and national hatred of the French, and the lack of these qualifications on the part of the French, resulted in the very rapid culmination of a contest whose outcome was as inevitable as fate.

In recent times the Russo-Japanese contest has but added another illustration confirmatory of this principle. On the one side was a body of men trained as to their knowledge and care of themselves and carefully disciplined in methods of hygiene, and whose lives were ruled by simplicity and experience gained in their war with China. On the other side was a host of individuals who, though fighting vigorously, were without the schooling in the habits of control and personal health, and whose superiors, in many instances, looked upon the war as an opportunity for skylarking and quite openly indulged in debauchery and drunkenness, displaying a most reprehensible behavior to those who should have been taught respect and obedience by precept as well as by example. This fact alone would do much toward determining the outcome of the conflict irrespective of the principles involved.

Under the same heading, we must touch upon the problem of city life versus country life. This contingency requires solution for the sake of the "generations yet unborn," which means the future of the race. The need of the greater freedom of life and exercise in the development of the physical health is well recognized by all medical men and is constantly reflected in the advice repeatedly given to parents and guardians to take the children or charges to the seashore,

mountains or country. The need for this is becoming greater every day and is more and more appreciated by the laity who are making every endeavor to live under country surroundings. They realize the greater demands that are being made upon all classes of men in modern times. Progress in her onward march is relentless in her toll of human health and life and the poorest laborer understands what is in store for his offspring as well as does the wealthiest manufacturer or contractor. All are consequently seeking the surroundings which will insure the greatest freedom from disease and permit a healthy and normal development in the growing child. The advantages and disadvantages of farm life and those of city life are very nearly equally divided excepting in the matter of health, and while the days of the rail splitter, the canal-boat driver and other similar famous Presidential employments are past, there are many equally invigorating forms of exercise which may be substituted with equally beneficial results. City life offers better educational advantages but the time is not far distant when this will not obtain, as there will be a wider distribution of high schools, normal schools and manual training schools, and those living without the limits of the large cities will be afforded equal privileges with those within their confines. Colton says, "Men by associating in large masses, as in camps and in cities, improve their talents but impair their virtues, and strengthen their minds but weaken their morals; thus a retrocession in the one is too often the price they pay for a refinement of the other." Utopia has not yet been discovered, and is to be considered as beyond the scope of the wildest dreams or imaginings of the present inhabitants of our sphere until practical methods are adopted and utilized to control the quality of the inhabitants. This feature of modern life will be discussed, however, under the third most potent influence in fashioning the life and health of the modern individual, which is national habits.

This has been partially covered in what has preceded, but the most important facts are yet to be mentioned. Certain traits have come to be characteristic of national life not only among us as Americans, but as well the English, Germans, French, Italians, and others, and as we are more intimately concerned with those of our own country, we will direct our attention only to the characteristics of the American individual. The first thing that is impressed most forcibly upon our observation is the fearful strain

upon, and tension of the nervous system. As physicians, we note it equally among the members of the stock exchange and the clerks in the stores, among the contractors and the drivers of their drays, among the farmers and the mill hands, among the matrons of society and the meanest denizen of the Tenderloin, among professional men and the most ignorant laborers; in fact, it pervades every profession, trade, business, occupation and form of work, as well as every method of amusement and recreation. But one class, viz., the hopelessly lost, the down-trodden outcast, is exempt because life holds nothing of interest or profit to him and, while death offers an apparently easy solution to the difficult and unsolvable problem, yet, because of either the lack of moral courage to take the final fatal step or the deterring fear of the unknown beyond, they continue to exist—nonentities, suckers, human leeches,—without hope, ambition or even a soul to save. The pulsating, throbbing life of the world is made up of the sum total of the energies of its inhabitants. Its constant feeding and stoking means progress while to bank its fires means inevitable retrogression. There is no such thing as standing still; the course of events is marked either by advancement or decline. Many circumstances have conspired to produce this condition of affairs and we may now turn with advantage to the consideration of a few of these.

In order to improve the condition of the laborer in all branches of work, Congress and many State Legislatures have enacted laws regulating the hours of labor, and have much shortened them from former times. What has been the result? The employer is forced by the demands of his enterprise to drive the employed harder, in order to accomplish as much in results as during the longer hours, because wages are not lowered, cost of material and of production is as great as before, hence output must be maintained to supply the funds for his undertaking. The effect on the men or employees is to increase tension and strain and the individual worker is more fatigued after the eight-hour than after the nine or ten hour day, because of the double source of energy expenditure or loss. He knows full well that if he fails to accomplish the required task, he will forfeit his position to the man who is capable of the demands, hence the anxiety and worry which use up so much energy. After the day of toil, recreation is sought, for, as Locke says, "Whoever hopes to employ his time with efficiency

and vigor, must allow some of it to pass in trifles." In this, again, there is a useless waste of that vitality which should be stored for future demands. The great majority are not content with simple and pleasing diversion, but must search after that which will excite and appeal to the senses most strongly and, before they are aware, part of the night has passed and needed rest and sleep have been lost. Sir Thomas Brown said, "Half our hours we spend in the shadow of the globe and the twin brother of death exacteth one-third of our time"; that is, eight hours of sleep are essential to health and, while many are able to exist with less, the effects of this loss will be manifest in the offspring. Of themselves they have a remarkable fund of vitality and their power of transforming food into energy is tremendous, but there is in such a disquietude of the nervous system which is bound to assert itself in a most deleterious manner in their children. No man or woman has the right to disregard posterity. We have no moral or legal right to transmit to a child a constitution tainted or weakened by functional or organic changes or disturbances than we have to walk out on the street and murder a man who has never harmed us or even known us. The child is just as innocent as such a man and yet, by our disregard of Nature's laws, we lower our own vitality and undermine our health and then frequently wonder why our children are not healthy. Were a sufficient time spent in resting, the nervous system could and would easily repair the damages of the enforced activity during the shorter hours of labor, but we may be missing some excitement if asleep, so we spur on, hoping that in some way nature will overlook our transgression and will fail to exact her penalty for the crime. Fourteen years ago a young lady came to Philadelphia to earn a living and secured employment in one of the large stores. The hours were from seven to six, and as she lived with relatives she began to pass the evenings in various ways, retiring any time between eleven and one o'clock. In a few months she consulted me as to a group of symptoms typical of exhaustion of the nervous system. Being familiar with her mode of life, I presented the alternative of going to bed at nine o'clock every night and keeping her health and position or at eleven o'clock and losing both. She chose the former and has been in the employ of that firm ever since, and has besides had the ambition, with the necessary strength back of it, to advance



to a most desirable position with much lighter duties and hours. This is but an example of what we are all meeting daily, and it is being augmented very greatly by the great competition between all organizations and individuals. There is but one contractor who is not hampered by the ill-effects of competition and he is the favored one of our city or state governments. No cause to fear with him. His bid is secure. No matter who is pitted against him, so long as he remains in the good graces of those in power. Among all others, however, the struggle for superiority and to surpass causes the destruction of a fearful amount of strength and vitality. It is begun as soon as we are born in the boasted weight of the baby at that time and continued in the most wonderful gains in weight, and later in the development of brightness and acumen. If he does not gain as rapidly as the "brat" next door he is stuffed with cream and artificial foods, rubbed with cod liver oil or other equally odoriferous product and subjected to countless dangers by the determination of his parents or so-called friends that he shall surpass all others. Through youth and school life with all its brilliant opportunities to lead his classmates in the classroom or on the athletic field, the competition is continued, and we see too many sad evidences of such motives to not be unalterably opposed to the system unless very carefully and very strictly limited by proper restrictions. "Competition is the life of trade," but we are being forced to pay too great a price for the privilege of carrying on the work. There are too many wrecks left by the wayside. How many might be saved were a little more thought given to them and a little less to the all-absorbing idea of surpassing the other man, is difficult if not impossible to know. However, the time will come when cognizance of the castaways, wrecks and downtrodden will be forced upon us and that, too, in a manner which will demand and command consideration.

We have already spoken of the enervating influences, but we pause to emphasize their part in producing the modern American disease. The excitement, hurry and hustle, the turning night into day, the pleasures alluring and seductive which beset us on every side—all are productive of incalculable harm to the average man or woman. Forced to struggle with every fibre of his being to earn a living or compete with another, perhaps better qualified by nature for the contest, and then entering the whirl of amusement

to be robbed of rest which should be devoted to the restoration of needed energy, there soon comes a time when the body, brain and entire being begin to show evidence of fag. Indulgences, devotions with sacrifices at the shrines of Bacchus and Venus still further sap the vitality and the vitiated atmosphere of the factory, store or workroom, with impure food and restricted living quarters, quickly fasten upon the victim a disease or condition which either temporarily or permanently incapacitates him or brings a quick exit to a life of promise and usefulness. The candle may be burned at both ends, but it will only last one-half as long, and city life furnishes the stimulus and opportunity to such combustion as no other community does.

Next in importance comes heredity—that silent, insidious but irrepressible and unalterable force, which leaves upon each and every one the stamp of good or evil, with a preponderance of the latter. The immensity of this force is appalling and one can but mention it in such a paper as this, as its limitations are infinity and about it volumes have been written, though half has not been told. No greater fallacy was ever promulgated than that by Thomas Jefferson when he wrote, "That all men are born free and equal is a self-evident truth,"\* and no one appreciates the full significance of the misstatement more deeply than do we as medical men. The heritage transmitted from parent to offspring is so variant that discussion is entirely negated. Modern life begets modern individuals and moulds and fashions them as she chooses and there is no redress. Here and there one steps aside and refuses to bow to the dictum and demands and, by so ordering his ways, is able to overcome the baneful effects of the transmitted qualities. The vast majority, however, pass along with the throngs in fancied security and implant in themselves more firmly the stigmata of inherited degeneracy, and hand them down to their posterity with the self-complacent thought that "I was not responsible for it and I will not be held responsible." You know, and I know, he has done nothing to remedy the conditions in his own case, though all that was needed was the effacement of self to a certain degree. We cannot overcome heredity, but we can alter its consequences, partly in ourselves and almost totally in our offspring. We may cry that the fault was not of our own making, but we dare not forget that its transmission is of our own doing, and the same privileges extend to coming genera-



tions that existed with the present, viz., the right to be well born. It is a God-given right and he who interferes with it must bear the penalty, no matter who suffers by it. This is one feature which comes directly home to each and every one of us and that social conditions exist at the present day, which, if allowed to continue, will swamp the nation, is due to our own neglect. What right has A, who is afflicted with some incurable but transmissible malady whether physical or mental, to marry and beget children whose care will be thrust upon the community? None, and for two reasons, one of which is that the children have the right to be born well and strong and the other is that the community was never constructed for the purpose of harboring such individuals. In a certain institution for the feeble-minded, in Pennsylvania, are two families of children, one numbering nine and one six, all of whom are feeble-minded and whose parents were similarly afflicted. In the great majority of states the law does not prohibit such from marrying and raising children and the maudlin sentiment which actuates many of our self-styled philanthropists is directed against any measures which will curtail the personal liberty of these poor unfortunates. Was there ever a greater misconception of the principle of liberty? Why not consider the liberty of the other side—that is, the responsible members of the state? They are the ones who must assume the burden of caring for such monstrosities as above mentioned and their liberty is seriously encroached upon and infringed when such responsibilities are thrust upon them. When proper legislation shall restrict the right to marry to those who are capable of rearing healthy citizens for the country, much after the manner of the old Athenian law, then and then only will personal liberty in one very important respect be safeguarded. Hugo Münsterberg ("Prevention of Crime," in April *McClure's Magazine*) says:

"When a school for criminal boys was carefully examined, it was found that, of the two hundred boys, one hundred and twenty-seven were deficient in their general mental make-up, either in the direction of feeble-mindedness or in the direction of hysteric emotion and epileptic disturbance. And fuller light is thrown on this figure as soon as others are added: in eighty-five cases the father or the mother, or both, were drunkards; in twenty-four cases the parents were insane; in twenty-six cases, epileptic, and in twenty-six further cases, suffering from

other nervous diseases. Not the criminal tendency was born with the poor children, but the insufficient capacity and resistance of the central nervous system; and this was their inheritance from abnormal and degenerate parents."

This is the record of what is not infrequently seen and constitutes one of the most disgraceful and blighting incidents of our boasted modern civilization. Bad parentage is not permitted by any one engaged in agriculture, horticulture or stock raising. Poor grain, imperfect shrubs or plants, and, above all, inferior breeding animals are discarded and only those specimens are utilized which will yield the greatest returns in dollars and cents. Ah! there is the secret. If there was an immediate monetary valuation placed upon the boys and girls or men and women and it were possible to realize upon them by trade or barter, much greater care would be exercised in the mating of individuals and proper means would be used to prevent the undesirable members from reproducing their kind. It is encouraging to note that "Connecticut and Minnesota prohibit marriage of an epileptic, imbecile or feeble-minded woman under forty-five years of age or cohabitation by any male of this description with a woman under forty-five years of age. Also that marriage of lunatics is void in the District of Columbia, Kentucky, Maine, Massachusetts and Nebraska, while in Michigan persons suffering from sexual diseases are prohibited from marrying." In certain other states there are laws passed\* or pending directing the sterilization of habitual criminals to prevent them from begetting others of like kind, and so soon as a healthy sentiment to this effect shall be agitated and advocated by the united medical profession, it will be adopted by all states in our Union, and in another generation we shall have markedly different conditions with which we as a profession shall deal. As Dr. Z. R. Brokaway of the New York State Reformatory for Criminals, puts it: "The past century was devoted to the care of criminals, but the present will be devoted to their prevention." Some one has said, "The famous blue grass pastures do not make the winning racer; a 'scrub,' though kept on them for years, will never get a prize, for, as George Eliot said, 'Breed is stronger than pasture,'" and it is eminently true of the human race that to eliminate the degeneracy which is so widespread, and is growing more and more apparent at an alarming rate, we must look to the parentage of the future generations.

With this superficial review of some of the conditions of modern life which have proven most potent factors in the evolution of modern man, we are prepared to briefly consider the influence which it exerts upon types of disease, whether common or rare. Disease in itself is a distinct entity and as such is subject to the same code of laws as governs normal hygiene and health. It is a common experience to find the progress of a certain condition altered by a change in temperature, climate, form of diet, increase in amount of sleep or loss of same and many similar extrinsic or intrinsic factors. In fact, many pathological conditions may frequently be influenced to a favorable termination by simply taking advantage of this fact and discarding all forms of medication, and this feature has done more toward creating the class of physicians known as "therapeutic nihilists" than any other fact or group of facts. It would, therefore, seem entirely reasonable, and is generally accepted as true, that change in the type of the host must of itself effect a change in the type of the disease. The majority of you have had the privilege of listening to the classical teachings of the great physicians and surgeons of twenty-five years ago, and will readily recall the clear-cut and accurately defined symptomatology of disease which was so indelibly impressed upon the listener's mind. You will also recall the enthusiasm with which you made your earlier diagnoses from this same accurate and classical standard of the diseases as met in general practice. But how often do you now see such a type of a given condition? Typhoid fever with its group of characteristic symptoms and lesions, and its typical course has given place to a condition almost impossible of recognition except through the laboratory. The recent epidemic of influenza presented a markedly different type of symptoms and attack from that of its first appearance in this country about twenty years ago. The contagious diseases seldom present the typical forms of eruptive lesions and the infectious processes are recognized as having a much greater tendency to become constitutional in cases where formerly they were purely local. One might enumerate one instance after another in proof of the statement, but the fact is too apparent to require it. Wherein, then, lies the cause? Naturally, it must exist either in the host, in the causative germ or in both.

The changes in the host have been so great as to readily influence the development of any intrinsic process. Whether the loca-

tion be such as to render the disease subject to anatomic conditions, to hematic, to glandular, or to any form of physiologic activity, the effects will vary with the character of these same agents. Physiologic processes may be less active, with the result that there is increasing rapidity in the spread of disease and change in the sequence or manifestation of the symptoms, or vice versa. A plethoric or anemic state of the blood becomes at once most important in the inhibiting or aggravating a given infection and the chronic exhaustion of the nervous system and its accompanying evidences of degeneracy, which are so widely prevalent, but serve to still further and more pronouncedly alter the course of the disease. The simple raising or lowering of the vitality which supplies the means of resistance to the body, will, in many instances, determine accurately and positively the continuation or the destruction of the infecting organism or process, and in all cases will materially modify its progress. One might multiply examples of these synergists and antagonists but medical experience with disease consists of a preponderance of this observation and renders it superfluous on my part. Probably the most commonly observed instance is that which is at present occupying the attention of the medical world and the laity as well, viz., tuberculosis. The chief effort in prevention, as well as in therapy, is to improve the nutrition, change the character of the soil, and so inhibit absolutely the germ development or gradually overcome that which has already taken place. This represents the altering influence of the inherent qualities of the individual and is commonly referred to as the personal equation. It is an ever-changing factor, but one which is always considered in forecasting the prognosis of a given case.

The characteristics of the special organism vary greatly in different subjects and at different periods. The virulence in one case and the almost innocuousness in another may be due to the circumstances of its cultivation or to the reaction of the tissues and secretions of the host. The life history of the vast majority of germs is not yet thoroughly understood and a method of recognition is not long discovered ere another investigator finds other forms which respond to the same technique. Its susceptibility to qualities in the host is strongly confirmative of the theory of the pathogenic germ becoming non-pathogenic under certain conditions and vice versa. The comparative newness of their discovery will, of course, account



for our lack of knowledge regarding them, but we do know that there is a relatively constant law of proportions between their progress and the existing condition of the culture media. Whether their development occurs in a media that possesses the qualities essential to their nourishment or in one inimical to them, will markedly modify their virulence and functional activity. The phagocytic activity of the leucocytes, another name for cellular resistance, and many similar conditions in the body, exert a profoundly altering effect upon the bacterial growth and hence upon the manifestations of disease, producing variations in types. The most recently advanced theory as to control of germ activity is the opsonin theory of Wright and, while it is yet a theory, it serves as an explanation of an observed fact, viz., that bacteria are profoundly affected through the medium of their own secretions, even though we may not know the actual working of the process. We, therefore, readily see that the positive agent of disease is subject to variation from conditions existing within the host and from secretions of its own, and thus the progress of the disease of which it is the generator is directly influenced whether in symptoms or in pathologic manifestations. These, in turn, constitute a variation from the standard or common type and the logical sequence is established. One more proposition follows our conclusions as to the above relationship of modern life and disease which need only be stated to be readily understood by all. It is—change again the type of modern life and hence of modern man, by simpler modes of life, physical education, race selection and limitation, amelioration of the tension of city life and conditions of labor, and, while disease will still exist, it will prove much more simple in its manifestations and will be most favorably modified in all its phases.

For, as Nabb says,—

"Nature is impartial,

And in her work of man, prefers not names  
Of ancestors; she sometimes forms a piece  
For admiration from the basest earth,  
That holds a soul; and to a beggar's issue  
Gives those perfections which make a  
beauty up;

When purer moulds, polish'd and gloss'd  
with titles,

Honors and wealth, bestow upon their bloods  
Deform'd impressions, objects only fit  
For sport or pity."

## A BRIEF RESUME OF THE TREATMENT OF GALL-STONE DISEASE.\*

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As a rational sequence of our latest conceptions as to the etiology and pathology of gall-stone disease comes the question, "Is this not strictly a surgical condition and amenable only to operative measures?"

Theoretically, in the light of our present knowledge as to the underlying pathology, it does seem unreasonable to expect to cure this condition without resort to an operation. However, from a practical standpoint probably all physicians and the majority of surgeons are agreed that the greater number of these cases should be treated in a palliative manner. I am aware that some of our best and most enthusiastic surgeons are continually urging an early resort to the knife when once the diagnosis of gall-stones is made. Certainly we should heed the advice of these men who, from their ability and enormous experience are so well qualified to lead the profession.

But, having the history of the vermiform appendix and its operative treatment before us, let us endeavor to keep within the bounds of sound judgment in our treatment of this—the appendix of the upper abdomen. While with our better knowledge of the surgical technique and the proper operative procedures there will be an increasing number of cases where operation should be advised there will still remain many that are best left with the medical man.

Let us remember that the medical men of yesterday, before operative treatment was thought possible, were able to do much for their patients who were suffering from gall-stone disease. At the present time we are justified in advising the non-operative or palliative treatment in the mild cases.

In cases where the most prominent symptoms are those of the so-called dyspepsia or chronic indigestion; in cases that have not too frequently recurring acute attacks, with or without jaundice, provided the patient is well in the interval; in cases of acute impaction either in the cystic or common duct, we should persist in medical treatment for three weeks to see if the stone does not pass.

No operation is needed if a patient, after several unsuccessful attacks of colic, once

passes through a thoroughly successful attack with the passage of stones. We must continue to relieve symptoms where, owing to the condition of the patient, in the judgment of the surgeon the operation would be more dangerous than the disease itself.

In the consideration of the medical treatment it is well to divide the symptoms of gall-stone disease into those of the acute attacks and those occurring in the intervals.

The treatment of acute attacks of biliary colic needs but passing mention. Morphine to relieve the pain and relax the spasm, allowing the stone to become movable, full hot bath if practicable, hot applications, mustard draught, drinking large quantities of hot water with bicarbonate of soda. In severe cases possibly the use of chloroform, cracked ice for the vomiting if severe and stimulants in case of collapse.

It is in the interval that the medical man has his opportunity to keep the patient out of the clutches of the surgeon. If he can keep the attacks far enough apart and relieve the patient in the meantime, this will solve the question as to the necessity for operation. The treatment during the quiescent stage should be with the idea of relieving symptoms, controlling inflammation, dissolving or removing stones and the prevention of recurrence. The consideration of these points for treatment involving as it may almost the entire realm of medicine, hygiene, exercise and diet being out of the question, just a few salient points and most commonly approved methods will be mentioned.

In addition to the local condition this treatment should aim at improvement of the general health. Foremost should be regulation of the diet. A person who has had an attack of gall stones should become almost a vegetarian and drink large quantities of water. Fats and sugars should be absolutely interdicted. They should eat very sparingly of meat products. All richly cooked and highly seasoned dishes must be avoided, as well as the drinking of malt liquors. Next to a suitable diet systematic exercise is a measure of the highest utility, especially those exercises which involve the use of the abdominal muscles.

Constipation must be actively combatted, preferably with salines, and active elimination kept up by the skin and kidneys. It is advisable that those who can afford it be sent for a course of treatment to Carlsbad or one of the American springs, as Saratoga or Bedford. Aside from the beneficial effects of the waters, the rules of living which

are enforced at these places are calculated to improve the conditions from which these patients suffer.

The use of medicines in the treatment of gall stones is largely on an empirical basis. At the present time we do not concede the possibility of dissolving gall stones within the biliary passages by means of medicines, yet, be the theory upon which their action is explained what it may, there is a general unanimity of opinion among practitioners that a number of remedies exert a favorable influence upon the removal of, at least, the symptoms of cholelithiasis.

We shall not consider those drugs which are given for the relief of symptoms and correction of the various functional disturbances that accompany gall-stone disease, but speak only of those that directly are theoretically or practically of use in the prevention or removal of gall-stones. This will naturally include cholagogues, both direct and indirect, and in response to the microbic theory of the origin of these stones those drugs which, secreted with the bile, would exercise an antiseptic action both on the infected bile and the mucous membrane lining the bile passages. We must remember that, while the development of microbes is a necessary part of the process, that the retention or stasis of bile is a very important factor in the formation of gall stones. Even if bacteria are present, if the bile is thin enough in consistency and flows freely, there will be little danger of gall-stone formation. Thus the use of direct cholagogues which increase the amount of bile actually secreted, and indirect which insure that it is carried off. The remedy which is probably the most used at the present time to secure a discharge of bile, the character of which does not favor the formation of calculi, is the salicylate of soda. Next in point of value are the phosphate of soda and podophyllum. There are numerous others that are supposed to stimulate directly the bile secreting function of the liver. Of the drugs, which while not increasing the amount of bile, are of great use in causing the removal of that already secreted, the best is calomel. It is well to give calomel at regular intervals to those who suffer from gall-stone disease.

The use of large and repeated doses of olive oil still finds favor with many and has undoubtedly proved its value, although it is hard to explain just the way it acts. Apparently it was originally given with the idea of, in some way, oiling the biliary ducts. As the oil is absorbed, taken up by



the lacteals and emptied into the thoracic duct, without going anywhere near the liver or bile passages, such an idea is absurd. The question of biliary antiseptics is still in its infancy. Could we have a perfectly reliable and safe means of disinfecting the bile, its value would be manifest. Kuhn, of Germany, and many others have attempted and are still trying to discover a reliable disinfectant that can be given by the mouth and secreted through the liver in sufficient amount and in proper form to disinfect the bile. He has found several substances that act more or less in this manner. It is a strange coincidence that the most successful of these is salicylic acid and its sodium salt, which has been so long used empirically. Thymol and menthol are excellent disinfectants for the bile since they are freely secreted by the liver, but they cannot be given in sufficient quantity to be very active in the bile on account of their toxic qualities.

The administration of these drugs, theoretically promising, has not as yet given very good results clinically. Probably the best method we have at present of curing an infection of the gall bladder and ducts is to make them aseptic by drainage or removal.

**THE OPERATIVE TREATMENT.**—Probably in no class of diseases has surgery seen more brilliant triumphs than in diseases of the gall bladder. Not less so than in almost erasing the old "inflammation of the bowels" from the mortality tables by early attention to the appendix. Not generally attempted until a later date than appendical surgery, the low mortality and successful results have given such an impetus to this work that it is not surprising to have men like Mayo, Richardson, and others as well known, advising operation as soon as you can definitely say that gall stones are present. This is good advice to their patients, for, with their skill, the sufferer has the best chance for a cure; but I think it is rather extreme for those not able to receive the advantages of a surgeon who has performed thousands of gall-bladder operations. With this idea it is a difficult matter to exactly mark out the border line between the medical and surgical cases. The following indications certainly mark the necessity for operative interference and as time goes on probably many more will be placed in this category.

**IN ACUTE CASES** when there is an acute suppurative cholecystitis with septic symptoms; when there has been a perforation of the gall bladder; when the attack has been

so prolonged and severe as to threaten the patient's life, with localized or general peritonitis; when there is an empyema of the gall bladder.

**IN THE INTERVAL** between frequent attacks, when, after an acute attack, the patient does not recover but suffers in the interval in spite of medical treatment. These cases are usually suffering from chronic cholecystitis or cholangitis or some complication such as obstruction, adhesions or the like, for the relief of which we must resort to surgery; with stone in the common duct after four weeks of persistent jaundice (here we must give calcium chloride a few days before operation, as there is great danger of uncontrollable bleeding in cases of long standing jaundice); with stone chronically impacted in the cystic duct with dilatation of the bladder it is probably safer to interfere though many of these cases get well without operation; when we have an intestinal obstruction or some other dangerous complication; for the cure of fistulæ.

**The Choice of the Operation:** Cholecystotomy, opening the gall bladder, cleaning it out and immediately closing it and all of the cut tissues without drainage; cholecystostomy, opening and cleaning the gall bladder with free drainage, with or without fastening the rent in the gall bladder to the abdominal wall, or cholecystectomy, removal of the gall bladder with or without the cystic duct (which should be called the "ideal" gall bladder operation) can only be positively decided upon after the abdomen is opened. Even then much depends on the judgment of the individual surgeon. Simple opening and closure of the gall bladder, formerly much advocated and called "ideal," presents so many post-operative difficulties that it is rarely done at the present time, and then only when the stones are entirely confined to the gall bladder and no infective or inflammatory processes are present in the wall of the gall bladder itself. As the presence of these latter conditions are not always to be recognized by the naked eye, and in light of our present ideas invariably present, it is probably safer in all cases to consider the gall bladder containing stones as the seat of inflammatory changes and better treated by drainage or removal. After cholecystostomy, which has no higher operative mortality than cholecystotomy, unfortunate post-operative sequellæ are rarely met with and by drainage we can expect to cure many of the less severe cases of cholecystitis and cholangitis. In fact, many operators of wide experience consider



that there are practically no recurrences after cholecystostomy in properly selected cases.

Removal of the gall bladder, with or without its duct, is steadily gaining favor as the operation of choice when there is any question as to the probability of the inflammatory processes present undergoing complete resolution. The mortality is only slightly higher, less than two per cent., and as in appendectomies you remove the cause of the disease, which should be the object of every operative procedure.

These three, or better, two, operations are the ordinary methods of dealing surgically with gall-stone disease. The atypical procedures that become necessary because of some special complication are of interest chiefly to those who are doing gall-bladder work. Anastomosis of the gall bladder or common duct to adjoining portions of the gastro-intestinal tract and the removal of calculi, deeply impacted in the common duct, present some of the most difficult problems in operative surgery.

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### THE ANNUAL MEETING

**Will you help to make it a good one?**

**We have a good program.**

**We meet in a good place.**

**Make it a good meeting by helping to secure a good attendance, by being at every session on time, by taking part briefly in discussions, by seeking in every action taken by the Society the highest interests of the profession and the highest welfare of the citizens of our State, and thereby maintain the honorable record of the Medical Society of New Jersey; lastly, but not least important, by bringing the ladies with you.**

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### IMPORTANT

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#### PRIZE ESSAYS

Five Essays have been received, but one is short three pages—pages 1, 2 and 3. Will the author of the paper signed "Neptunus," please send the first three pages at once to Dr. C. J. Kipp, 560 Broad Street, Newark, N. J.

### "DYSPEPSIA," WHAT DOES IT SIGNIFY? \*

**By Emery Marvel, M. D., Atlantic City.**

The prevalence of a condition that is so general and the extenuation of which jeopardizes comforts, economy, and even life, is my only apology for offering this subject for your consideration.

In the class of patients known as "chronics"—chronic in the sense that their ailments are continuous—the high percentage who complain of impaired digestion is remarkable. In the language of the patient, it is "dyspepsia." Acute or chronic may respectively modify the term, but, inasmuch as the general use of the word "dyspepsia" by the laity has reference to the protracted form, chronic dyspepsia is implied in this discussion.

Indigestion, dyspepsia, biliousness and stomach trouble are common terms used by both patient and doctor, and each conveys an indefinite yet suggestive idea. The patient uses these terms with as much, if not greater, familiarity than the doctor, and I am not sure when so used they are not often better comprehended by the patient than by the physician.

The symptoms which, when grouped together in part or *in toto* make the composite picture, is usually labeled by one of these terms, are: Disinclination to eat; discomfort associated with eating; nausea, vomiting, fullness, pain and tenderness felt in the upper abdomen; gaseous eructation; heartburn; constipation; headache and other nervous manifestations.

I take it that in observing this class of sufferers, the experience of various physicians does not greatly differ. These patients are not necessarily so sick as to be confined to bed, but just "feel mean" continuously or intermittently, as the case may be. By far the greater majority are able to keep going. They constitute a good proportion of the so-called office patients—those who consult you at your office. If you note the subjective symptoms given by all office-consulting chronic patients, you will find a large majority stating that they have "indigestion, dyspepsia or bilious attacks."

I have recently endeavored to gain from a number of physicians practicing in various localities, an approximate percentage of office-chronics giving such statements. The lowest estimate, in answer given to my in-

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\*Read before the Atlantic County Medical Society March, 1908.

quiry, was 50 per cent. and the highest 80 per cent. The mean of these extremes gives an average of 65 per cent., which I believe is a fair estimate. That is, of all office-patients consulting the general practitioner for chronic trouble, when questioned as to their complaint, 65 per cent. will reply "dyspepsia," or some similar term, as one, if not the most pronounced, of their subjective symptoms. What does this signify? Does it not indicate that the foundation for much of the crippled efficiency of human service rests in this entanglement? That much suffering and weakness, to say nothing of the disagreeableness of the so-called dyspeptic temperament, abides here? That bread-earning is made more difficult, lives and homes less happy, and more—that a large sacrifice is paid at the altar of death, by this generous condition?

Thirty per cent. of all deaths resultant from cancer are due to carcinoma of the stomach. I have no need here more than to suggest the frightful loss of life from this one cause, yet in naming perforating ulcer, cholecystitis with its resulting sepsis, septic myocarditis, septic nephritis and acute pancreatitis—the terminal result of the so-called "get-over-the-attack" appendicitis, as well as cancer, I am merely giving a list of the more severe conditions whose pathologic lesions express themselves by the symptoms grouped in the term "dyspepsia."

But to save life is not the only mission a physician has to fulfil. "It is not all of life to live," but the problem is to live with the least discomfort. A physician's duty is not only to prevent or postpone death, but also to help life, to make it more useful by helping people to be more comfortable. Not all the causes producing the discomfort of so-called dyspepsia are necessarily death-dealing, but those that are not rob life of many of its comforts and should invite relief. In most cases it is attainable, but attainable only by a proper and timely application of the remedy. Certainly it behooves us to ascertain what "dyspepsia" signifies.

The digestive chain reaches from the mouth to the anus and embraces, besides the main alimentary tube, the liver and the pancreas. Digestion is accomplished by the chemic and motor activity of all the links of the chain. Disturbance in the process may be occasioned by incompetency in any one, or in all, of the parts. It may be functional or organic. Previously, when our mental conclusions had to be based upon unproven theories, by far the most frequent disturbances were accepted to be functional

in origin. Recently, however, since a close-range study by operation exposures has brought to light the frequent occurrence of lesions that previously were suspected only in rare cases, the opinion has changed and it has been proven by these exposures that organic disease is a more frequent cause of disturbance—a notable commentary upon the value of demonstration-study in ante-mortem pathology. In view of these facts, the etiology of this symptom group certainly deserves a closer study than is at present given it by the average physician.

For convenience of discussion we may divide the causes of "dyspepsia" into functional and organic, as I have before indicated. Functional digestive disturbances secondary to a general disease, or those implicated by a remote local disease, respond to treatment proportionately with improvement in the primary trouble. That functional disturbances of the digestive organs do exist *per se* is an accepted truth, but that this cause is greatly exaggerated is no less true. Hypo-chlorhydria or hyper-chlorhydria may be found as variable in pyloric spasm resultant from gastric duodenal ulcer, appendix or gall-bladder irritation, as is revealed by functional disturbances without local lesion. Variation in the quantity of hydrochloric acid found in the gastric contents does not constitute a disease. It is a symptom and forms but one link in the chain of evidence that makes possible the definite and correct diagnosis. To treat such conditions by the addition of acids, when acid is deficient, or by removing the excessive acid by neutralization with a salt, is like an attempt to equalize the ocean's tides and about as effectual. The giving of pepsin, caroid, pancreatin and like remedies, if helpful at all, benefits only the temporary condition, they do not cure. It is this will-o'-the-wisp principle that has made rich innumerable producers of pseudo-digestants, established an almost invulnerable army of patent remedy proprietors and maintained malicious quackery.

Recently an ex-patient of one of the largest and most advanced surgical clinics approached me and reproached the profession of medicine upon this practice. He detailed how, previous to his entering this clinic for operation, he had been a sufferer for nearly eight years. He had taken during all this time so-called digestants for his "dyspepsia." The number and brands were beyond his power to enumerate. At first they were prescribed by his doctor, then the druggist, later the newspaper column and finally he



took his advice from the dyspeptic quack for his dyspeptic quackery. Thirty-nine health resorts and sanatoria, reaching from El Paso to Carlsbad, claimed his stay with equally fruitless effect. Morphine, with much of what the use of that agent entailed, was one of his acquisitions. Crippled competency to manage his business, loss of a large percentage of his working hours, and an actual expense of over forty thousand dollars in cash, are a few of his sacrifices besides his pain and suffering. Imagine, if you can, the delight of this man when he said to me, "Five weeks ago my gall-bladder was removed, and to-day, with the exception of deficient strength, I am well. Why should these doctors, for I had many, let me suffer so all this time?" I did not answer his question at that time, but I hope it may be better answered by us in not causing our future patients such unnecessary suffering by continued procrastination. His is not an unusual story. In fact, with some modifications, it is a common post-operative detail. In the patient's way of reasoning every doctor whom he consulted and who did not direct him to the course that proved his relief, was a subject for his contempt. I wish not to be understood as of the opinion that gall-bladder disease is responsible for all dyspepsia, nor for the most of it; I do believe, however, that herein lies one of the frequent causes of the condition, and that it is every physician's duty to diagnose this cause when it does exist and to have the courage to advise a sane remedy for its cure.

Gall-bladder disease, gastric and duodenal ulcers, chronic irritation of the appendix, deformities in size, shape or position of the abdominal organs, make up the principal organic causes of dyspepsia. It is to be assumed that, when the symptoms complex of dyspepsia are being analyzed that all conditions contributing to functional derangement, such as those resulting from general disease, or disturbed function of the chemic apparatus itself, and those arising from remote local causes, such as prolapsed kidney, will be considered. Though it may be true that the majority of cases bearing testimony of such disturbance belong to the functional group—of this I am not sure—this fact makes it no less urgent to recognize the possibility of organic lesions as being responsible. In fact, it would seem a more cautious routine to prove, in each investigated case, that no organic lesion does exist.

But why dwell upon these respective causes? It is because they form a reason-

able division between non-operative and operative treatment. Functional dyspepsia, with rare exceptions, requires surgical application for its cure. This division of treatment may not be fully accepted by every physician; but I am of the firm belief that that the more closely each physician studies his dyspeptic patients, and the more he avails himself of the opportunities to observe the demonstration at the ante-mortem operations, the less doubtful he will become of the justification of this division. "Procrastination is the thief of time." In the treatment of organic dyspepsia, procrastination is the robber of comfort, happiness and life. The putting off of action is perhaps less responsible for these deprivations than is the extenuation of the condition by ineffectual action, by which hope is blighted and confidence lost. It is due to this indefinite, or it may be, indifferent treatment, applied to this class of patients, that the doctor becomes the advance agent for the patent medicine administration and the quack's office. The patient grows weary of not being relieved, or, if relieved, of not remaining so, confidence in his physician is questioned and then lost. He turns to promises of this, that or the other remedy, or of the self-advertised "specialist" for dyspepsia. And who is to blame for his doing so?

Let us consider further these conditions. By functional dyspepsia we mean the "dyspepsia" resultant from disturbances in the function of digestion, when no injury or displacement of the anatomic structure is present. There may be diminished or excessive digestive fluids. The motor action may be deficient. Exhaustion from disease or overwork may influence either. Intemperate eating or drinking, in quantity, quality or time, may be responsible. The personal equation in susceptibility to functioning power is an element. It would be irrational, with our present knowledge of surgery, to remove a portion of the glands where excessive secretion is present; or to transplant extra glands when diminished secretion is observed. To correct the intemperance is rational and feasible. So is the correction of the indiscretions. Direct rest where rest is needed; provide rest to the organ by refraining from eating or by modifying the diet, and administer such remedies as will support the functions of the organ. This is the line of treatment applicable to the most of functional dyspepsia, and is truly clinical. The principle involved is to remove nature's opposing factors and to support nature.

The same principle is applied in dyspepsia of organic origin. In organic dyspepsia the cause of the disturbance rests in an anatomic anomaly. There is an injurious anatomic process operating. It may be an injury like an ulcer of the stomach or duodenum; it may be a dilated or displaced stomach; a pyloric stenosis; constricting adhesions; or pressure from a displaced kidney; or it may be an excitation from an appendix concretion, biliary calculus, or an active gall-bladder disease. Remove the opposing factor—*i. e.*, correct the ulcer, release the stenosis and remove the calculi or the appendix.

Ulcer of the stomach may claim for its cure the application of both medical and surgical treatment. The internist, with the application of clinical principles, is able to ameliorate and sometimes, no doubt, cure the lesion, but not always. Were gastric ulcer an isolated entity, it would be probably a clinical disease. But is it an isolated entity? There is more than a suggestion that gastric carcinoma is a continuation of gastric ulcer. Mayo noted a clear history of cancer having developed upon ulcer in 30 per cent. of his operations for gastric cancer. Moynihan found a history simulating ulcer in 60 per cent. Out of twenty-two patients suffering with gastric carcinoma so far advanced as to be operative only by gastric enterostomy, Deaver found that no less than sixteen, or over 72 per cent., gave an ulcer history.

Ledlecka quotes Sapesko as stating that, among one hundred cases of gastric carcinoma, only ten were found in which the cancer was not engrafted on a preceding ulcer. Do not these observations offer more than suggestions? Are they not convincing evidence? If so, how can we hope to cure gastric cancer? If gastric cancer can be cured as cancer, more likely can it be cured as ulcer. Again, the diagnosis of ulcer furnishes too frequently beacon lights of cancer. Surgery cures cancer sometimes; medicine never. "There is no known drug," says Brewer, "or medicinal agent, no system of diet, massage, hydrotherapy, or outward application, no blind faith in hypnotism, Christian Science or mind-cure, which has ever for one moment arrested the progress of the disease (cancer) or in any material respect mitigated its distressing symptoms." Surgery would cure more often, did not medicine by its procrastination defeat the possibility of circumscribed excision. Wherein, then—the surgical or the medical practice—lies the preferable safeguarding of a patient suffering with gastric ulcer? What is said

of gastric ulcer may also be said of duodenal ulcer, with the exception possibly that the duodenal ulcer is less tolerant of medical procrastination and less rarely leaves doubt as to the category of the treatment which it requires.

Stenosis, or retarded drainage, due to gastric or kidney prolapse, or to both, is very polite and flirtatiously entertains medical treatment. To medicine these conditions are cordial, while surgical approaches are entertained with serious mien. Medicine benefits, surgery corrects, most times cures, and at other times makes less difficult the way for medicine. Pyloric stenosis due to induration, spasm or multitudinous adhesions, has less respect for medicine. In fact, it respects only the attendance of the surgeon, who severs its bondage and gives back its liberty.

Appendiceal irritation is a wolf in sheep's clothing, little to be suspected, responsible for much. Acute appendicitis is frank and above board, and has shown its face so clearly as to have become familiar and it claims here no discussion. But the hidden character of the chronic form—the deceiver of the "get-over-the-attack" kind that breaks out after apparent quiescence, exploding in a rapid gangrene formation, perforation, septic peritonitis and death—this is the character to be looked for, understood and controlled. One of its sneakish expressions is in the form of pyloric spasm, so well pointed out by Dr. W. J. Mayo. Pain in the epigastrium, nausea, sometimes vomiting, cloaked in the term "gastralgia"—a word without a practical meaning. Dr. Mayo has lucidly likened its action upon the pyloric to the operation of the miner's sluice-canal. The alimentary track represents the sluice, the pylorus and the ilio-caecal valves two gateways. An injury to the lower gate requires rest for its repair, and instruction is given through the Auerbach plexuses of nerves to shut off the current at the upper gate—the pyloric. The pyloric contracts, it holds fast with a spasm, pain, perhaps vomiting results.

Recently it was my pleasant privilege to visit a certain large clinic. I was there six days and I saw ninety-six operations. The diagnosis was made before operating, and confirmed at the operation in all but four cases. In these four the prominent symptom was epigastric pain. A probable diagnosis was made of either gall-bladder disease, gastric ulcer, or appendiceal concretion. In three of the four cases chronic appendicitis, with a fecal concretion in the appendix, ex-



plained the trouble. This little member of the belly family should be always considered as a suspicious character when dyspepsia is manifest, and, when found guilty, sentenced to be removed with surgical expediency.

We have been considering the ileo-colic appendix; but there is another appendix to the gastro-intestinal canal, which, like the ileo-colic appendix, has a doubtful office, and is capable of much mischief. This is the gall-bladder—a receptacle for bile, bacteria and gall-stones; dispenser of bile sometimes, bacteria and mischief often. The liver has a very important dual function. It secretes bile—an agent evidently needed in the digestive operation, and excretes from the blood much that is objectionable to this fluid and to the interest of the organism. Bacteria are eliminated by this route. The hepatic duct is the common exit from the liver for these blood-deported factors. The gall-bladder is a possible stop-over station for these factors en route to the intestines. Many of them take advantage of this privilege. The conditions there favor repose. Bacteria and biliary salts, sometimes and in some people, become very chummy and prolong their stop-over privileges. Coalition is subsequent and a gall-stone is consequent.

It has been taught in the past that gall-stones were innocent occupants of the gall-bladder. Whether gall-stones conducted themselves better previously than they do now, I can not say, but I am sure that they are competent to do much mischief as we see them to-day. That gall-stones may occupy the bladder without giving trouble may be possible, but of this possibility I am, like Deaver, Mayo, Moynihan and others, very skeptical. That their presence there does not give the trouble usually recognized in familiar language by most ordinary observers, is most probable. That is not necessarily the fault of the gall-stones. He who waits for colic, jaundice and a tumor by which to recognize gall-stones, is like the sailor who does not recognize a leak in his boat until the cabin is filled with water. The respective symptoms are equally advanced and dangerous. "Dyspepsia" is the cloud in the distance, the first flurry of wind that may indicate gall-stones.

Nor does medicine dissolve, nor water wash away, nor rest nor travel remove these unwelcome obstacles. If one will try to dissolve a gall-stone by submerging the calculus in a solution of any of the so-called solvents recommended to be taken internally for this purpose, his faith is more likely to be dissolved than the gall-stones. If these

agents can not effect this by direct contact, is it not an insult to one's intelligence to ask for belief that they will do so in the gall-bladder, which they cannot reach, except after they have been sifted out of the circulation by the liver and have passed through the small cystic duct? That gall-stones may and sometimes do find their way out by dilating the cystic duct, urged by the force of the gall-bladder, is a fact. So it is a fact that a fire originating in the room of one's home may, and sometimes does, burn itself out without destroying the house, but who will trust it? Even if one or more stones are set free it is suggestive evidence that more are remaining. Common duct obstructions, cholecystitis, general sepsis, septic myocarditis, nephritis and peritonitis are some of the sequellæ.

Remove nature's opposing factor. How can medicine do it? Surgery removes gall-stones, when no complications are present, with much ease and a minimum of risk, thereby preventing the more serious complications. When complications have arisen surgery is a necessary resort; but circumstances are adverse. He who would guide the best interest of his patients will, in the future, I believe, diagnose gall-stones as gall-stones (dyspepsia) not gall-stone complication, and have his patient relieved.

It is not the purpose of this paper to detail the differential diagnosis of the different causes operating to produce dyspepsia. It is the aim to give emphasis to those organic lesions that are oftentimes responsible, to appeal for a closer scrutiny in order to understand these causes when they do exist, and thereby make possible the application of the proper means to eradicate them.

Definite diagnosis is often difficult, but when there is suspicion of an organic lesion exploratory investigation should be considered. Any case of "dyspepsia" not responding to medical treatment in the course of a few weeks (not months) or when responding, recur, should be investigated by an exploratory incision. Dyspepsia resulting from insidious cancer does not differ from the same symptoms resulting from functional disorder, but if cure is hoped for, it matters materially whether it is recognized and excised.

Dr. W. J. Mayo admonishes us that, "In spite of the remarkable development of laboratory methods, the main diagnostic means are clinical, and prolonged attempts to establish a laboratory diagnosis are provocative of delay and should be discouraged. The most careful and painstaking methods of ex-

amination should be insisted upon, but they should not be unduly prolonged." He also urges that "exploratory incision is the only way an early diagnosis of cancer of the stomach can be established."

Whatever else the term "dyspepsia" signifies, it at least calls for a close investigation as to its cause, awakening suspicion of the existence of an organic disease. "Dyspepsia" innocent to-day, may become dangerous to-morrow. Gall-bladder disease, pyloric stenosis and appendix affection are common causes and should be treated with surgical dispatch. Gastric and kidney ptosis and dilated stomach invite consideration. Gastric ulcer, and what seems to be its consequence—carcinoma—on being weighed in the light of history and experience, points forcibly to the need of early excision of ulcer.

Finally, procrastination should be discouraged, and when definite diagnosis is not obtained by reasonable delay for clinical and laboratory investigation, surgical exploration should be utilized.

### VENEREAL DISEASES.

The April issue of *Critic and Guide* contains as its only article Dr. W. L. Holt's pamphlet on Venereal Diseases; Their Nature, Symptomatology and Prevention, edited by Dr. W. J. Robinson, the editor of *Critic and Guide*. It is worthy the careful reading of every physician. Its introduction sets forth the terrible prevalence of these diseases and their resultant mortality and misery to innocent women and children, as well as to the vicious, licentious and depraved. Its five chapters ably deal with the following subjects: (1) Gonorrhœa, Its Cause, Course and Complications; (2) Chancroid, Its Cause, Course and Complications; (3) Syphilis; (4) Indirect Results of Syphilis—Tabes, General Paralysis; (5) Personal Protection against Venereal Disease. We give below Chapter V. of this Treatise.—EDITOR.]

#### PERSONAL PROTECTION AGAINST VENEREAL DISEASE.

The very nature of the venereal diseases makes them preventable. Here more than anywhere else in the range of human experience is an ounce of prevention worth a pound of cure. As is clear from the modes of transmission of these diseases already described, all that any man or woman has to do is to avoid sex-intercourse or other close personal contact with those carrying the

contagion, and also public drinking cups and toilet articles. *In practice this means for men to avoid all indulgence in prostitution; for women it means not only to escape being seduced and forced into or voluntarily entering prostitution, but also if possible not to marry a man who they suspect has been a victim of venereal disease.* Every girl should be taught that it is of vastly greater importance for her to know the sexual and physical record of her suitor than his bank account; and her brother or father should consider it his sacred duty to investigate the moral character and reputation of the young man on whom his sister's or daughter's happiness and life depend.

It is very easy to say to young men: If you want to avoid the venereal diseases, simply avoid illicit intercourse, keep continent. But it is easier said than done! Whether a man keeps continent or not depends unfortunately on a great many factors besides his own character. It would take another book to do justice to the economic, social, moral, physical and educational forces which are responsible for the widespread indulgence in promiscuous intercourse among modern men. I can only take time here to contradict three very common fallacies, which remove to a great extent the natural fear which young men have of sexual indulgence.

*The first fallacy is that sexual congress is necessary, especially for young men in order to preserve the manly vigor.* Unfortunately some doctors have supported this idea; but the entire weight of medical authority in America is against it. The experience of successful athletes is of great practical value in this connection; it speaks unqualifiedly for continence. The idea that the sexual organs will degenerate if not used is proved false by experience. Continence preserves virility, while sexual indulgence exposes to the venereal and other nervous diseases which cause impotence.

The second superstition is that a man can run practically no danger of contracting a venereal infection if he uses some antiseptic wash after sexual indulgence or some protective appliance. It is reasonable to suppose that such precautions do prevent many infections, but experience establishes beyond a shadow of doubt that none of these methods can be relied upon absolutely. The author happens to know among his own small acquaintance a young man who religiously used antiseptics, but nevertheless was infected by both syphilis and gonorrhœa.



The third false belief is that it is safe to go to a regular brothel. The origin of this idea is probably the fact that a much smaller percentage of regular prostitutes are infected than of "girls on the street," and also that in Paris and many of the European capitals all the licensed prostitutes are subjected to regular physical examination and quarantined for a time if found diseased. One may get some idea of the frequency of venereal infection among registered prostitutes (or regular inmates of brothels) from the figures given by Dr. Ravogli for Cincinnati, where a system of medical licensing and regular physical examinations and treatment was introduced in 1893, but later abolished. In the year 1893 there were 142 prostitutes treated for venereal disease; in 1894 there were 224; in 1901 there were 529, in 1902 324. As the total number of licensed and examined prostitutes in 1903 was only 625, it appears that not less than a half of them are infected at least once during the year. In Paris no less than 13.5 per cent. of the licensed prostitutes were found diseased, and over 30 per cent. of the unregistered. Good French authorities say that about 65 per cent. of all prostitutes have been infected before the age of twenty-one. They pass most of their infectious period unlicensed, which explains the much lower morbidity among the licensed, most of whom have passed through the infectious stage. Moreover, there is not now any system of registration and medical examination of prostitutes so far as I know in any American city.

No, the American people, so stupid in much of their legislation, have wisely refrained from legalizing the institution of prostitution and attempting to make it safe and attractive. The example of Paris, which has tried this system for a hundred years with little success, should teach us not to enact any such vicious laws. We must prevent and gradually abolish prostitution, not blindly attempt to sterilize it. Every American youth must be taught that the only safe way for him to avoid the venereal plagues is to keep continent until marriage; that the patron of prostitution is truly responsible for the perpetuation of the institution and quite as injurious a member of society as his female partner.

And, after all, it is not at all impossible to keep pure and continent. *Continence is very much a habit; and the habit once well established requires no great effort to maintain.* Like all habits, it must be established by seeking those influences which strength-

en it and avoiding those which weaken it. Every man knows from his own experience what influences help him to control his sexual impulses and what hinder. Every man must find these out for himself and be ever on his watch against the traps set to arouse his animal nature. For some men daily outdoor exercise is essential to preserve their physical and mental equilibrium; others must particularly avoid overeating; while still others must especially guard against being idle, for then lascivious ideas get possession of their minds.

*But the greatest danger of all to the control of the sexual impulse is drinking.* M. Forel proved the great importance of liquor as predisposing to sexual indulgence by collecting statistics in France, which show that no less than 76 per cent. of all venereal infections occur under the influence of alcohol.

*The most restraining influence on the contrary is the true love and companionship of a pure girl.* Many a young man has been saved from moral and physical ruin by the love and confidence of such a girl or woman. Every man should grasp every opportunity to obtain this great blessing and moral anchor. There is only one force stronger than sexual passion: that is true love.

Dr. Robinson at the close gives a practical "Addendum" on Individual Prophylaxis, in which he gives the percentage of syphilitic infection in the various armies, from England's 75 per 1,000 to Prussia's 4 per 1,000—in the latter venereal prophylaxis is obligatory. (The United States' percentage is 34 per 1,000). Dr. Robinson in conclusion says:

Think of the difference between 75 and 4! The difference in the percentage of gonorrhoeal infections is still greater. And the difference is caused exclusively by individual prophylaxis. If we can reduce venereal infection to such a small percentage in the army and in the navy—bodies not especially noted for sexual moderation—why can we not accomplish still greater results by spreading the principles of genuine practical venereal prophylaxis among the people at large?

Why can we not? Yes, we can. Give us *carte blanche* in the matter of propaganda and we will undertake practically to abolish in this country the venereal plague—the triad of gonorrhoea, chancroid and syphilis—within one decade. But as it is not likely that a philanthropist will be forthcoming so soon to help in this imperatively needed



agitation, the work of the abolition of venereal disease will have to proceed more slowly.

We will do our share towards the uprooting of the black plague. But we ask the cooperation of the medical profession and the intelligent lay public. The former *will* help because it—the better part of it—has always worked altruistically in the sanitary interests of the people; the latter *must* participate in the work—in sheer self-defense.

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**Don't forget the Annual Meeting at Cape May. You would enjoy a week's vacation at Cape May, at one of the handsomest and best hotels in the country, which offers you the reduced rate until July 1st. Go, if you can, on Wednesday, June 17th.**

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### LODGE PRACTICE.\*

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By George E. Holtzapple, M. D., York, Pa.

Lodge practice is a branch of contract practice which furnishes medical attention to members through an organization or club. Such organizations or clubs often procure and supply medical service to its members, and in some instances to the whole family of which the head is a member, at such ridiculously low fees that the cheap medical service itself becomes a drawing card or an inducement for men to join these organizations. Many of these organizations are at the same time beneficial, paying weekly sick benefits to its members.

Being anxious to furnish you with data on the extent of lodge practice throughout our state, I addressed a circular letter to two hundred and thirty-one physicians living in that many municipalities, asking them the following questions:

"1. How many lodges, giving the name of each in your community, town or city, employ physicians by contract?

"2. What is the membership of the various lodges in your community, town or city, that employ physicians by contract?

"3. State approximately how many other individuals there are, members of families, who receive free treatment because the head of the family belongs to a lodge that employs a physician by contract.

"4. Kindly ascertain the amount paid by the various lodges for contract medical service.

"5. How many physicians are in your community, town or city, who do lodge practice?

"6. How many of these physicians belong to a county medical society in affiliation with the state medical society?

"7. Do you have any provisions in the by-laws of your county medical society which prohibit lodge practice?"

In a number of instances I communicated with a few physicians living in the same city. To one

hundred and fifty of these physicians I addressed the second communication soliciting their assistance. One hundred and twenty-six of these physicians, to whom were addressed two communications, failed to acknowledge the receipt of my letters, or over one-half of the physicians addressed failed to make any response. In most instances the physicians addressed were members of the American Medical Association, and had been practicing from ten to twenty years—long enough to be able to make a living without depending upon lodge practice. This experience is reported inasmuch as it is of considerable significance and manifest evidence that we have many in our ranks who are indifferent and unconcerned about the material interests of our profession.

The tables I have prepared are based on the reports received from the physicians of one hundred and five towns or cities, though you will find a number of these reports contained no data. Information was solicited from every town of considerable size in the state, and the names of those not appearing in the tables are those from which I failed to receive a reply. [We omit the tables.—Editor.]

The lodges furnishing medical attention, that are most numerous in the state, are the Foresters of America and the Fraternal Order of Eagles. According to the tables you will see they do not always pay the same. The information given in the tables was obtained with much difficulty and it is possible there may be some errors, though on the whole I think the tables will serve as a practical demonstration of the subject before us. The Foresters of America usually pay one dollar *per annum* per member, the latter only being entitled to free treatment. The total membership of this organization in Pennsylvania up to November, 1906, is reported to have been 46,946. The total membership in Philadelphia alone was 30,843, leaving a membership outside of Philadelphia of 16,103; of the latter number only 4,395 are included in my reports, leaving a balance of 11,708 unreported, yet scattered throughout the state. This does not include the possible increase in membership during the last year.

From the information received I would conclude that the organization ranking next numerically is the Fraternal Order of Eagles. The members of the Eagles usually pay two dollars *per annum*, which entitles them and the members of their families to free treatment, the latter not to include primary venereal diseases and cases of obstetrics. The total membership of this organization I could not ascertain, but they would seem to be more numerous throughout the state, not including Philadelphia, than the Foresters. The approximate membership of this organization as far as reported is 6,591, and the total number of individuals approximately entitled to free treatment is 15,000. Of the other organizations furnishing medical attention to its members I have not been able to obtain very much definite and reliable information; they are, however, quite numerous in some cities having a large foreign element.

The lodges reported are Hungarian, Polish, Italian, Greek, German, Heptasophs—German, Mystic Chain, Independent Order of Red Men, St. Michaels, St. Johns, also insurance casualty companies and, in addition, family contract practice which I am informed is common in a certain part of this state. In this section many physicians attend families by contract, receiving from

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\*Read in the Special Meeting, Medical Society of the State of Pennsylvania, Reading, September 23-26, 1907.—*Penn. Med. Jour.*

one to two dollars per month per family. From what I could ascertain I believe that 15,000 is a very safe estimate of the approximate membership of these organizations above enumerated as found to exist in the one hundred and five towns and cities from which I have obtained the reports. In fact, I have no data at all from Pittsburg; and from Philadelphia only a report of the Foresters which is very complete and satisfactory for statistics. Many of the members of these organizations are mechanics or artisans and earn good wages and are amply able to pay their legitimate bills.

Many of these members belong to labor unions and by organized effort exact every dollar from their employer they can, and, again, by having membership in some fraternal organization try to evade payment of a reasonable fee for medical services. Medical service when needed is one of the most urgent necessities conducive to the well-being of man, whether rich or poor. Those who are very poor and needy, and alone worthy of charity, are better provided for to-day by dispensaries and free wards in well-equipped hospitals than ever before; so there is no legitimate need for fraternal organizations to furnish medical service practically free of cost to its members, especially those who are able to pay, for these have no just claim on any physician for free medical service, which service requires more training and education than any other calling before it can be practiced intelligently. Individuals who by organized effort are willing to exact, and again by virtue of having membership in some fraternal club are anxious to evade the payment of an honest debt, show by their conduct and inconsistent life that they are willing to receive what they are not willing to give.

It becomes the duty of the medical profession by organized and individual effort to protect itself against such wrong and injustice that would ultimately cause its financial and professional ruin. It is nothing uncommon for history to repeat itself and in medical literature we are told that in certain parts of Australia, Germany and England, the profession of medicine suffered to such a degree by the existence of these fraternal organizations that visits were made for a few cents. In one of the reports I received, I found the statement that a lodge doctor living in one of the most thriving cities in the state of Pennsylvania offered to visit a family living in a town ten miles distant, the family being members of his lodge and the time necessarily consumed in making the visit three hours, for the contract price of three cents. The number of physicians reported as actually doing lodge practice is sixty-three. In a number of instances, including Philadelphia, it was impossible to learn how many are thus engaged. Philadelphia has 169 courts of Foresters; if these average one doctor to a court and to this number is added one or two physicians for every court named in my tables and for which no attending physicians were reported, then it is safe to conclude that between two and three hundred physicians are engaged in lodge practice in communities representing about one-third of the population of the state.

The number of physicians reported engaged in lodge practice and belonging to county medical societies in affiliation with the state society is twenty-six. This, however, is not the total number, for it does not include Philadelphia and a number of places from which I could not learn

this fact. From the reports I learn that only seven counties have adopted special resolutions or provisions in their by-laws to prohibit lodge practice. Of these seven counties there are two, each having one physician engaged in lodge practice, and at the same time permitting him to retain membership in his society. I learned from the reports received that in a number of instances county medical societies took action and expelled members who engaged in lodge practice, and also denied them all professional intercourse with the members of the society while they persisted in doing lodge or club practice. This I learned had a salutary effect, at least in a few cases.

The total population of the communities from which I have received reports represents about one-third that of the state, and of these people about one out of thirty-three is entitled to practically free treatment. "The laborer is worthy of his hire" be he a railroad magnate, manufacturer king, merchant prince, a mechanic, a laborer or a physician; only the poor and needy are worthy of charity and if they are sick ample provision is made for them by free dispensaries, public wards in hospitals and by the willing service of magnanimous men who now and always have honored and characterized our profession.

It would be most undignified if our profession would attempt by organized effort to exact certain fixed fees as is done now by many artisans and hodcarriers, but it is our moral duty to attempt a more complete organization and by a more organized effort protect ourselves against all forms of imposition and injustice that would lower the dignity, stay the progress and lessen the usefulness of the medical profession, for the laity whom we serve would be the greatest to suffer. The Principles of Ethics of the American Medical Association are the prescribed rules of conduct to which all the members of this society have subscribed, and to which all other physicians ought to subscribe, if they are possessed with altruistic motives. If there is anything in it that is uncharitable let the critic point it out and suggest an improvement, an amendment, that will bring it more nearly in harmony with the teachings of the Great Physician whom we should all try to imitate in going about doing good toward our fellow-man; and having done our best, again, "the laborer being worthy of his hire," we are justly entitled to a reasonable remuneration for valuable services rendered; and this depends on the nature of the treatment employed, the skill required, the time consumed, the ability of the patient to pay and the station of the patient, whether in public or private life.

The charges for medical services can not be a fixed and inflexible fee. This would seem to be the view of Judge Ashman of Philadelphia as expressed recently in a decision in the Orphans' Court: The life of a rich man, he said, is worth more than the life of a poor man, and the physician has the right to charge the millionaire for his service more than he does the laborer. The physician is unlike the merchant who has goods of different quality to sell at various prices. He must give his best service in every case. But it does not follow that the service is worth the same in every case. Human life has a pecuniary value of variable quantity, greater in the millionaire than the laborer. Thus the practitioner of common sense has a maximum and a minimum charge and makes out his bills to suit the pecuniary circumstances of the patient.



Article VI., Section 1, of the Principles of Ethics of the American Medical Association reads as follows: "By the members of no profession are eleemosynary services more liberally dispensed than by the medical, but justice requires that some limits should be placed to their performance. Poverty, mutual professional obligations and certain of the public duties named in Sections 1 and 2 of Chapter III., should always be recognized as presenting valid claims for gratuitous services; but neither institutions endowed by the public or by the rich, or by societies for mutual benefit, for life insurance, or for analogous purposes, nor any profession or occupation can be admitted to possess such privilege." Article VI., Section 3: "Some general rules should be adopted by the physicians in every town or district relative to the minimum pecuniary acknowledgment from their patients; and it should be deemed a point of honor to adhere to these rules with as much uniformity as varying circumstances will admit."

The spirit of the letter of the preceding sections of the Principles of Ethics of the American Medical Association would forbid any physician to accept the appointment as physician to a lodge which pays the usual fee noted in the tables which accompany this paper. A reasonable fee for medical services, rendered to those able to pay, is not only our moral desert, but is imperative if the progress in medicine is to continue and the welfare of the laity is to be preserved. The disgraceful nominal fee usually received for lodge practice pauperizes the profession and in proportion to its extent lowers the dignity and lessens the usefulness of the medical profession. Such practice contravenes the principles of justice and equity which should be religiously upheld and made the basis of all our professional conduct toward our fellow physicians and toward the laity.

The present wages of the laborer and the mechanic, the salaries of those in office, the gigantic income of the manufacturers and merchants and the general prosperity of the country at large, are unprecedented, and yet the fees of the average practitioner have not advanced an iota in many localities during the last twenty years. The effect of the nominal fee paid for lodge practice is apt to create the impression that those outside of a lodge are paying too much for medical service, when, in truth, very few physicians are properly equipped with literature, laboratory apparatus, instruments of precision, and very many things now needed to practice medicine intelligently and in accordance with legal requirements that were unknown a few decades ago, all because of inadequate remuneration. To obtain a medical education and maintain an honorable position in the profession requires more money, more time and more labor than in times past. The intelligent study and treatment of disease requires a physician to be much better equipped, and to give much more time for careful investigation than ever before. The support of a family and the necessities of life cost more with every passing year. Hence, if the progress in medicine is to continue and the high standard of the medical profession is to be maintained, fees must increase and not decrease.

According to the tables we find that there are practicing among about one-third of the population of the state a few hundred physicians who render willing service to promoters, and are personally responsible for assisting in pauperizing the

medical profession. We are "our brother's keeper" and our liberty to accept a contract ceases when its effects are detrimental to the well-being of our profession and the laity. I fail to see how any physician, with any sense of dignity, can, for a paltry sum and under the cloak of some fraternal organization, enter any threshold where he is not the physician of choice. Such practice also affords the unscrupulous physician the privilege to ingratiate himself into favor among the clientele of his neighbor. I have heard of such efforts having been made. "Good fees means good physicians, and to pauperize the profession means to reinstate the unlearned, immoral, and incompetent." It seems to be the consensus of opinion that physicians generally give fraternal organizations their money's worth, no more.

One thing needed in the medical profession consists of more men who are independent and unselfish and who will strive for principle and right regardless of any temporary pecuniary loss. In consulting every issue of the *Journal of the American Medical Association* since 1903, I find numerous articles condemning lodge practice, and in not a single instance do I find that a lodge doctor comes out in print and attempts to defend his position and practice, a striking disparity. A reasonable fee should be paid for medical service whether it be rendered to an individual or corporation. The fee for medical service should not be determined by the whim or fancy of an individual, company, or corporation, but, as provided for in Article VI., Section 3, of the Principles of Ethics, by the physicians of said community.

There may be some forms of contract practice that are legitimate, and result in the mutual protection of physician and patient; such as railroad surgeon, physician to certain mining districts, and temporary construction gangs away from near-by physicians, but the remuneration should always be commensurate with the services rendered. The physicians who engage in lodge practice may usually be divided into three classes. To the first group belong young men just starting out and who accept such positions simply as a tide-over and then resign after being able to get along fairly well. To the second group belong men of all ages who have failed to establish a well paying practice. To the third group belong those who are well established and have a lucrative practice but who are inordinately selfish and avaricious and who apparently have no neighbors in the profession, for they are not Samaritans by practice. What is right for one physician to do is right for all to do. Imagine all physicians engaging in lodge practice, alas, then pity the sick! Some physicians engaged in lodge practice admit it is wrong, but try to excuse themselves by saying that if they will not do it others will. They admit it to be a wrong and manifest a willingness to do the wrong as well as the other fellow, and hence are no better. Others in lodge practice try to excuse themselves by saying it is no worse than the work given to cheap insurance, but the one consists of the practice of medicine among a clientele who do not come to them out of choice but because they are cheap; the other is not practicing medicine at all. Again, two wrongs do not make one right and hence this is no excuse at all. The question is, is this kind of contract practice just and right, or is it unjust and wrong?

I have tried to present this subject to you as it exists in over one hundred towns of our state to-day, though much may not be included in my

report, and I attempted to argue and prove to you that this kind of contract practice is unjust and wrong, and, in proportion to its extent, it lowers the dignity, stays the progress and lessens the usefulness of the medical profession. The next question is, how can we correct this wrong? The first thing to do is to attempt to effect as complete an organization of our profession as possible, and physicians, like people in lower walks of life, must be educated and those who can not be educated ought to be disciplined. Envy, jealousy, and greed are nearly always at the basis of our internal dissensions. These hidden monsters, too often found within us, grow like weeds if nurtured and nourished. But with proper education and training they may be kept within proper spheres. This kind of education and training ought to begin with the professional training, and the college professors who have the honor and unique privilege to stand before the young men of to-day, who will be physicians of to-morrow, can do much by their own precept and example, to infuse young men with a love for their chosen profession and everything that pertains to its honor, dignity and usefulness. Young medical men when leaving the college halls ought to have been taught and educated to make immediate application for membership to a county medical society. Those physicians who have gone before ought to extend to them a hearty welcome and by their own precept and example impress these young men, starting out in medical life, that they have now joined ranks with an honorable profession, and that whatsoever is dishonorable in its members is shunned and spurned.

Sentiment needs to be created along this line, and this ought to begin in the medical schools, and by frequent editorials in the state medical journal as well as the *Journal of the American Medical Association*, and by frequent discussion of this important subject by the physicians of every community. The district councilor could lend valuable assistance. Thus, a unity of sentiment might be created that will uphold the honor, dignity and usefulness of the medical profession; and if there are any physicians who can neither be taught nor educated to love and uphold that which is just and equitable and right and honorable, then as a last resort let them be disciplined by exclusion from the medical society and from professional intercourse.

## THE MEDICAL COLLEGE IN RELATION TO THE NOSTRUM EVIL.

By Bernard Fantus, M. D., Chicago.

*Read before the West Side Branch of the Chicago Medical Society.*

I believe we all agree that the root of the nostrum evil lies in improper and insufficient training in pharmacy, materia medica and prescription writing in the medical schools of this country. Hence this point needs no further discussion. It may be profitable, however, to inquire why the instruction in these branches, so eminently important to practical medicine, should have become so poor. That it has not always been so deficient is proved, it seems to me, by the fact that this nostrum evil is of comparatively recent origin. Why, then, while medical instruction has improved in almost all other respects, has it retrogressed in regard to materia medica and therapeutics?

The answer to this question lies in the great recent development of the subject. Fifty years ago, only two divisions of the subject had to be taught, namely, materia medica and therapeutics. Since then the new science, pharmacology, or pharmacodynamics, has arisen, and has developed to such an extent that it has become equal in importance to the other two. A great number of new drugs has been introduced, increasing the bulk of material to be covered by probably one-half. Over and above all this, non-pharmaceutical therapeutics, including hydrotherapy, electrotherapeutics, massage, and gymnastics, dietetics and climatology have become of such importance as to demand almost as much instruction as the subject of medicinal therapeutics itself. And yet in many medical schools the time allotted to all these subjects has not been increased; and they have still to be taught under the old headings, "materia medica and therapeutics." It is self-evident that, under these circumstances, thoroughness of instruction became impossible. Especially is the new science of pharmacodynamics so fascinating that it draws the attention of both teacher and students almost completely away from the much less interesting study of the drugs themselves and of their prescribing.

Thus, class after class of improperly prepared students were turned out of the medical schools. They probably understood the mode of action of drugs better than did their predecessors, but they did not know how to prescribe them. At the same time they faced the modern demand for elegance in medication. No wonder that they fell an easy prey to the nostrum vendor.

It is plain, then, that in order to weed out the nostrum evil, its root must be attacked. I do believe that the old-fashioned teaching of materia medica should be resumed and carried on, in addition to the teaching of pharmacodynamics. That short courses in pharmacy should be instituted, not in order to make pharmacists of the medical student, but in order to enable him to understand prescription writing better. The time allotted to the whole subject should be at least doubled, and probably trebled; and the work of instruction in it should be carried on throughout the four years.

There is, at present, a gratifying tendency in this direction. For instance, the medical school that I have the honor of being connected with, has increased within the last few years, the number of hours at the command of the chair of materia medica and therapeutics from 135 lecture and no laboratory hours to 252 lecture and recitation hours and 108 laboratory hours. However, a great deal of work in this direction still remains to be done. I realize, of course, that the propaganda for reform of the nostrum evil must also be carried on along other lines, most of which have already been mentioned by the previous speakers. I may, however, be permitted to briefly summarize what seems to me the complete program of action in this campaign.

1. Better instruction of medical students in pharmacy, prescription writing and materia medica.
2. Reform the teachers of surgery, medicine and the specialties so that they will not undo the good work started by the teacher of materia medica.
3. Monthly medico-pharmaceutical conferences for the discussion and demonstration of the best methods of administering important drugs.
4. Missionary work with nostrum prescribing



doctors by means of circulars, pamphlets and personal interview. This part of the work could best be carried on by the druggists, as they know best who prescribes the nostrums.

5. Cordial support of the Council of Pharmacy and Chemistry by not prescribing anything that does not meet the sanction of this council.

6. Boycotting of journals that carry the advertisements of fake nostrum manufacturers.

7. Official publication of a physician's edition of the United States Pharmacopœia and of the National Formulary.—*Illinois Medical Journal*.

### APPENDICITIS.

Observations on Diagnosis based on 1,000 cases. Dr. G. W. Crile, in *Cleveland Medical Journal*, August, 1907, says:

There are still those who withhold a diagnosis until muscular rigidity, distention, and accelerated pulse appear, until the patient has passed from the safe to the dangerous period. Then others make an early diagnosis but delay operation until it is obvious that the direction of the disease is towards disaster, and if the inevitable follows they moralize and regret and err again. The author considers acute abdominal pain, rise of temperature and tenderness over the appendix with associated referred pain as sufficient evidence to warrant incision. If in addition there is a history of nausea and vomiting, of previous similar attacks, and no evidence of other acute disease, the diagnosis may be considered certain. He confines the bulk of his paper to the discussion of typical cases, grouping them as follows: (a) acute infection of the appendix with minimum local but maximum systemic manifestations, early complicated by bacteremia, indicated usually by chills, high temperature, early delirium and negative abdomen. In some of these cases the role of the appendix is only discoverable at autopsy. The presence of bacteria in the blood is a positive contraindication to operation. Maximum constitutional with minimum local symptoms foreshadow a fatal termination. (b) Appendicitis appearing in the course of other diseases or local disturbances such as gastroenteritis (the disease here steals in amid the general abdominal confusion) especially in children. Occasionally after abdominal sections, at the menstrual period, during the passage of stones from the kidney and gall-bladder, pregnancy, pyosalpinx and salpingitis, intussusception, ectopic gestation, typhoid fever, smallpox, cancer of the cecum; most of these of course are mere coincidences. He reports a case of typical appendicitis following the inversion rather than the removal of the appendix, that had fathomed by Edebohls. (c) Altered anatomic relations of the appendix, such as left-sided appendicitis, hernial-sac appendicitis. Since the diseased appendix may be located anywhere in the abdomen the location of the tenderness may be most confusing. Differential diagnosis is taken up in detail. (d) Cases first seen when late complications are present, such as multiple abscesses of the liver, retroperitoneal lymphadenitis, pyuria from the rupture of an abscess into the bladder, walking appendicitis causing lameness because of interference with the action of the psoas muscle. Slow formation of large mass of exudate as the local reaction to a very mild infection, abscess in the popliteal space communicating with the appendix by sinuses between the muscle planes. In another case the abscess burrowed upward into the lung

and emptied through a bronchus. (e) Chronic appendicitis; the symptomatology is often wholly different from the acute. No tenderness in the iliac fossa, no repeated colicky pains, little pain at any time, the principal manifestations being at times reflex disturbances of the gastrointestinal tract, such as indigestion, coated tongue, flatulency, diarrhoea or constipation, none of which respond to medical measures. There may be an occasional sharp darting pain in the epigastrium or even the left side, pain or a feeling of heaviness in the region of the stomach after meals, sometimes a feeling of accumulation of gas in the cecum with perhaps a little peristaltic pain. The diagnosis in such cases must often be made by a process of exclusion. The author is of the conviction that there are many more cases of chronic appendicitis causing reflex disturbances of the abdominal viscera than we have hitherto believed. He takes up the reverse picture, the diseases mistaken for appendicitis, central pneumonia of the right lung, all the onset symptoms of pneumonia except increased respiration rate may be referred to the abdomen. The important differential signs are that the tenderness in pneumonia is quite diffuse and in the wall of the abdomen, elicited by picking up the skin between the thumb and finger, and that there is lacking sharp muscular reflex and referred pain on pressure over the appendix. Renal calculi, cholelithiasis, perforation of the duodenum, or the intestines elsewhere, ureteral calculus, and pelvic peritonitis all may be mistaken for appendicitis. The author lays especial stress on the Head zone of referred pain and hyperesthesia. The appendix itself when diseased does not, as a rule, cause local pain, but the pain is referred to a distant portion of the abdomen. The impulses set up by injury or disease of the appendix pass up to and spread over the centres of the sensory nerve supply, causing radiation of pain over all or part of the abdomen. When the appendix is actively inflamed hyperesthesia may be found in a zone bounded by the middle line, Poupart's ligament, and the crest of the ilium. There may at times be another zone on the same horizontal plane extending toward the back. Pressure on the appendix will usually cause the patient to feel the same pain from which he has been suffering.

### UNUSUAL CASES REPORTED.

#### CASE OF DOUBLE UTERUS.

**Dr. W. P. Carr, of Washington, D. C., reported this case, with specimen, to the Medical Society of the District of Columbia, March 11, 1908.**

The specimen was removed from a colored woman operated on for uterine fibroids. At the operation a hard mass was found low down on the left side of the uterus in the normal position; this mass was at first thought to be a fibroma; on examination, however, the left fallopian tube was found to enter this mass, and on incision a cavity was demonstrated within which communicated with an os uteri, common to this small uterus and the larger, normally situated uterus. The latter had a single tube and ovary. Both uteri were the seat of fibromata.

Dr. G. Brown Miller had seen several instances of double uterus. Four years ago a case was encountered at Columbia Hospital in which there was both double uterus and double vagina; one

side was the seat of a gonorrhoeal inflammation, while the other side was free. He mentioned a case of Dr. Howard A. Kelly's in which pregnancy occurred in a rudimentary horn, with rupture and death from hemorrhage.

#### CASE OF STAB-WOUND OF HEART.

**Dr. G. T. Vaughan, of Washington, D. C., reported this case:**

The patient, a colored man, 34 years old, was stabbed in the left breast February 1, 1908. The knife entered through the third intercostal space at the inner side of the nipple. The man was brought to the Emergency Hospital forty-five minutes later; his extremities were cold and he was in a lethargic state from the effects of alcohol. A probe introduced into the wound passed downward and inward and indicated that the chest had been penetrated; an incision seemed to be justified. The usual incision for exposing the heart was made, beginning at the sternum, along the third rib to the stab wound, thence following the wound, it was carried downward to the sixth rib, and thence inward to the sternum. The intercostal muscles were divided, the fourth rib cut with bone forceps, the fifth and sixth ribs divided at the costal cartilages and a flap turned back, using the costosternal articulations as a hinge. The pericardium thus laid bare was found covered with blood; this was cleaned off, a three-inch incision made in the pericardium, and active hemorrhage was stopped by packing the pleural cavity. A small incision in the right ventricle could now be made out, from which feeble bleeding persisted. The blood could be effectually stopped by pressing the edges of the wound together; the wound was closed by continuous silk suture, but oozing persisted from the needle holes. A second row of silk sutures, ten in number, was then introduced; oozing still persisted from two stitches. These sutures were caught up and a catgut ligature thrown around both stitch and adjacent tissue; the wound was now completely dry. There was now no fresh blood in the pericardium. The cavity was wiped dry and closed with catgut. Much blood was found in the pleural cavity; this was carefully cleaned out. The lung was found to be completely collapsed and was represented by a little bunch at the apex of the thorax. The osteoplastic flap was turned back, and everything was sewed up airtight. It was thought best to open the chest again later, if it should become necessary for any reason, rather than leave any drainage in the wound.

The pulse improved as soon as the wound closed; Dr. Samuel Fry was present at the operation and observed the pulse throughout; the average rate was 120. The second day the pulse varied from 120 to 140, and continued so for several days; no stimulants were given except a little digitalis. On the fourth or fifth day delirium tremens appeared, and it was learned that the patient had been an habitual drinker. He improved under whisky, given in two-ounce doses every two hours; the pulse became stronger and the mentality lucid. The whisky was then cut down in quantity, but after two days he again became delirious; the whisky was resumed and improvement was again noted. He is still taking three drinks a day and may now be called well. On the tenth day the lung was found to be completely expanded. There was some cough and pneumonia was feared, but the cough disappeared.

The temperature was a little elevated at times. The patient sat up in bed on the twenty-third day. The wound was dressed at the end of two weeks; union was primary. In a little less than four weeks the man was out of bed.

(According to a recent article in the *Journal of the American Medical Association*, there have been nine cases operated on in the United States for penetrating wounds of the heart; five of these were successful. Six years ago Dr. Vaughan had read a paper in which all the cases reported at that time were collected—twenty-three in all. Many cases reported as repair wounds of the heart are erroneous; the case of Williams of Chicago, was really repair of the wounded pericardium and not of the heart. Dr. R. Harvey Reed in 1887 published the first report of suture of the pericardium.)

#### CASE OF OSTEITIS DEFORMANS.

**Dr. J. H. Ramsburgh, of Washington, D. C., reports the following:**

A. S., white, unmarried, age 68. Had had but few of the diseases of childhood. History negative as to tuberculosis and syphilis. When 15 years old he fell and broke his arm, and during his early manhood broke both arms several times; every slight fall or unusual muscular exertion resulted in fracture of some bone. Once, on trying to slide back the door of a street car, fracture of the clavicle occurred. In 1887 his figure was erect and he was very active both mentally and physically; but about that time he began taking some medicine for "brittleness of the bones." His bones seemed to soften; his stature diminished; his chest acquired a barrel shape; the long bones curved anteriorly; the bones of the skull enlarged and acquired a disproportionate shape. During the last five years of life the enlargement of the skull was rapid. The occipito-frontal circumference was 26½ inches, and from the tip of one mastoid process over the crown of the head to the tip of the other was 19 inches. He died December 15, 1907.

Dr. D. S. Lamb performed the autopsy in Dr. Ramsburgh's case—the examination being limited to the head. The brain was normal; the dura slightly thickened; the meningeal vessels somewhat larger than normal. The bones of the skull were soft—so soft that an instrument could be run deeply into them without much effort; the skull was much thicker than normal, distorted and nodulated. The scalp was thin; weight of the calvarium, 28½ ounces. Pituitary gland and fossa normal. The brain itself was normal to the naked eye; weighed 54 ounces. The entire body was pale. The long bones of the limbs showed well marked osteitis deformans.

(Paget was the first to describe this disease, in 1876. Up to 1901, only 66 cases had been recorded. The disease seldom appears before middle life, is found mostly in the male sex, and may last many years. Death is usually due to dyspnoea. The pathological process is a rarefying inflammation, going on to exudation and softening. The cause is unknown. The disease must be included among the productive inflammations; it is not a degeneration.)—From the May, 1908, *Washington Medical Annals*.

**Come to the Annual Meeting prepared, with brief practical points, to discuss the scientific papers.**



## MEDICAL INSPECTION OF SCHOOLS.

### Papers Presented and Discussed at the Passaic County Medical Society, May 12, 1908.

The importance of a thorough system of medical inspection in the public schools has been emphasized in this city many times in the past, but the subject has never been brought to public attention with more profound explanations of its true value than it was at a meeting of the Passaic County Medical Society, held in the society's rooms in the Braun building last night.

Recently the five physicians who serve as medical inspectors in the local schools petitioned the board of education to raise their salaries \$500 a year and double the number of such officials. If the members of the board who were in attendance at the medical society's meeting last night were not convinced of the reasonableness of the physicians' plea it is because they are prepared to controvert the statements of several well-known authorities on the subject.

Among those who discussed the value of a medical inspection in the schools and the splendid results accomplished were Dr. A. B. Poland, formerly superintendent of schools of this city, but now head of the Newark schools; Dr. Cronin, of New York, who is first assistant in charge of the eighty-seven medical inspectors in the metropolis; Dr. John L. Leal, Dr. E. J. Marsh, Dr. Thomas A. Clay. Each of these read lengthy papers on the various phases of the subject assigned to them. A general discussion followed, in which Dr. Walter B. Johnson, John R. Wilson, superintendent of schools; Dr. A. F. Alexander, Professor C. E. Reber, principal of school No. 16, and several others joined.

"Medical School Inspection and Its Relation to the Public Health," was the topic of Dr. Leal's paper. He told of the inauguration of the system of medical inspection in the schools of Boston in 1890 and traced briefly its history down to date.

"In prevention," said Dr. Leal, "time is the most important factor. The danger medical school inspection seeks to minimize is a peculiarly threatening one. In schoolrooms and buildings crowded with hundreds of those who, by reason of their close daily contact for hours and of their age, are especially liable to certain of the preventable diseases, infection and contagion find fuel for flames which prove most destructive unless quenched in their incipency."

Continuing, Dr. Leal said that, inasmuch as the state forces the attendance of the pupils, it should be its duty to safeguard their health. He said he believed that a physician in every school was as important as a principal.

Dr. Poland, who followed Dr. Leal, spoke on "Medical Inspection and the School Child." He stated at the outset that his knowledge was only general, not technical, and had been secured in the administration of school affairs in this city and Newark. The system of medical inspection, he related, was inaugurated in Newark in 1901, when twelve inspectors were named by the board of education and placed in the charge of the board of health. After seven years of trial the only objection he could see to the dual control of the inspectors by the two boards was from an executive standpoint. In all this time, he said, little had been done to correct organic or functionary deficiencies in children. This, to Dr. Poland's mind, should be the main aim of the inspection.

Pupils who, by reason of abnormal growths in

the breathing organs or enlargement of the tonsils, were deficient in their studies and classed as defectives, are a continual source of worry, he said, going on to relate in detail how entire classes of children were made to suffer because teachers were obliged to devote a large amount of their efforts to the defectives. Many of this class of pupils, Dr. Poland pointed out, were like indigent charges upon the state. Money was being paid for their education and no results being gained. This class of pupils, Dr. Poland argued, should be segregated, and special classes created for them, especially in cities of over 100,000.

Dr. Poland told of an inquiry instituted in Newark recently. There were found to be 2,325 backward pupils. Many of these were mentally incapable of profiting by ordinary school training. Dr. Poland asserted that the great majority of these pupils were backward because of their physical condition, and told how operative procedure by medical men had succeeded in improving all found to be thus affected.

Dr. Clay, who is one of the medical inspectors employed by the board of education, told of the work done by him and his associates, describing in detail their mode of daily procedure. He said that from September 1, 1907, until January 1, 1908, 5,349 pupils had been excluded for various causes.

Dr. E. J. Marsh, in his paper on "The School Inspector and the Family Physician," said that it was the duty of every physician to constitute himself an unofficial health officer. He told of the haste and inadequate facilities under which the inspectors work in Paterson, and made a plea for family physicians to establish mutual confidence with the inspectors and confer with them for the common good of the community. Many family physicians had been disposed to impute the motives of the inspector, he said, and directed attention to the injustice of this.

The address of Dr. Cronin, of New York, was most interesting. He told of the work being done in the big city under his supervision. His was a plea to the medical profession in general to recognize the value of the medical school inspector in the community and do all in its power to forward his work. He told how from his office 135 letters had been sent out to large cities in the United States asking them to furnish ideas of the methods pursued by them in the medical inspections. Forty-eight replies were received, and only twenty gave coherent accounts of the means employed. Many of the best replies, he said, came from cities of less than 100,000 population.

The real duty of the present age was to educate the children, he said, in hygienic methods so that the next generation would be one that would be better capable of solving these problems itself. Ninety per cent. of the children who enter the New York schools, Dr. Cronin said, are unfit to properly grasp their studies. He told how the teachers were compelled to waste their time in laboring with the mentally deficient ones.

Dr. Cronin said the medical profession should exert its efforts toward the theory of constructive medicine. Build up the child; that, he said, was the intention, or should be. Every 2,000 children, Dr. Cronin argued, should be supplied with a medical inspector and a nurse. The nurse would be given the names of the pupils excluded and could visit their parents and advise and caution with them as to what there was to be done.

The address of Dr. Cronin was brought to a close when he related the circumstances which led up to the school riots in New York a year ago. A class of about 150 defectives was gathered together and on a given day surgeons operated upon them and corrected their defects and since then, without exception, each has been doing splendid work.

Superintendent Wilson, in his discussion, said some law should be passed to enable the school authorities to get after refractory parents who were negligent of their little ones. He told of the good work done by the inspectors in the local schools and said the physicians and the principals were working in harmony. He referred in a general way to the improvement noted in pupils who had received proper treatment recommended by the medical inspectors. Others who discussed the subject were Dr. Johnson, Dr. Alexander and Professor C. E. Reber, principal of public school No. 16, who told of results secured with defective pupils in his school who had been handicapped by abnormal growths in their breathing organs or enlarged tonsils.

## Reports from County Societies.

### ATLANTIC COUNTY.

#### Theodore Senseman, M. D., Reporter.

The regular meeting of the Atlantic County Medical Society was held Friday evening, May 8th, in the Public Library Building, with good attendance. Matters of routine business were transacted. The following amendments to By-Laws were considered and adopted:

That the first three lines of Section 2, Chapter 2, of the By-Laws of the Atlantic County Medical Society, be stricken out and the following inserted in its place:

"The Annual Meeting shall be held at 12 o'clock noon on the second Friday in January of each year and regular meetings shall be held at 8.30 P. M., on the first and third Fridays of each month, excepting July, August and September."

Also this amendment to By-Laws of the Atlantic County Medical Society was adopted:

"That this Society establishes an Associate Membership, to include Dentists, Druggists and other men of science; that they be assessed the regular dues of the Society, less the State assessment."

At the close of the business session Dr. W. F. Ridgeway presented several patients in various stages of cure for the morphine habit and outlined his method of treatment.

The Society adjourned to meet Friday, May 15th, in accordance with the amendment adopted. Atlantic City, May 11, 1908.

### BURLINGTON COUNTY.

#### George T. Tracy, M. D., Secretary.

The regular meeting of the Burlington County Medical Society was held at the Maplewood, Beverly, N. J., April 8th, 1908, at 1.30 P. M. Dr. W. H. Shippo presided and appointed a committee to carry on post-graduate work.

Dr. R. O. Clock, of Burlington, presented an application for membership, which was referred to the Board of Censors. Our delegates to the State Society were instructed to vote favoring the State Society having charge of the medical defense of its members.

Mr. Max J. Walter, of the Pennsylvania Orthopaedic Institute and School of Mechano-Therapy,

avored us with "Illustrated Description of Modern Mechanical Means in the Treatment of Disease." The main points brought out in the discussion which followed were that the more frequent use of mechanical means in treatment was advisable, that osteopathy is a "bungled up system of Swedish movements, and that the well-trained osteopath was a good anatomist.

Recess was declared and we adjourned to the dining room, where every one took part in the proceedings without any argument. After dinner some routine matters were taken up. The new officers are: President, W. H. Shippo, Bordentown; Vice-President, M. W. Newcombe, Burlington; Treasurer, Enoch Hollingshead, Pemberton; Secretary, George T. Tracy, Beverly; Reporter, W. P. Melcher, Mount Holly.

The Society adjourned to meet at Moorestown June 10th, 1908.

Beverly, May 13, 1908.

### CAMDEN COUNTY.

#### Henry H. Sherk, M. D., Reporter.

The Camden County Medical Society held its annual meeting at the Dispensary building, 725 Federal Street, Camden, on April 28. The meeting was called to order by Vice-President Paul M. Mecray. The President, Dr. S. G. Bushey, was unable to be present, owing to his continued illness. The following officers were elected to serve during the ensuing year: President, Dr. Paul Mecray, of Camden; Vice-President, Dr. William B. Jennings, of Haddonfield; Secretary, Dr. Daniel Strock, of Camden; Treasurer, Dr. A. Haines, Lippincott; Historian, Dr. Alfred Cramer; Reporter, Dr. Henry H. Sherk; Censor, 1913, Dr. William H. Iszard; Trustee, 1911, Dr. H. Genet Taylor, all of Camden; Legislative Committee, Drs. Henry H. Davis, William I. Kelchner and John K. Bennett; Committee of Arrangements, Drs. Howard F. Palm, Paul H. Markley and William H. Pratt; Delegates to Medical Society of New Jersey, Drs. Paul M. Mecray, Henry H. Davis and Marcus K. Mines; Delegates to Gloucester County Medical Society, Drs. J. Edward Howard, Alexander Scanlon Ross and Orran A. Wood; Delegates to Burlington County Medical Society, Drs. J. S. Baer, J. Watson Martindale and Charles H. Jennings; Delegates to Salem County Medical Society, Drs. J. L. Nicholson, Leslie C. Lyon and E. A. Y. Schellenger; Permanent Delegate to the Medical Society of New Jersey, Dr. John F. Leavitt.

A vote of thanks was tendered to Drs. Ramsey and Lowrey, members of the Legislature, for the valuable services they rendered the medical profession during their terms of office.

Dr. Griscome and Dr. Knowlton were proposed for membership and referred to the Board of Censors.

Dr. Allen Lettie Ward, of Camden, and Dr. W. S. Long, of Haddonfield, were elected members of the Society.

The Society was favored with the presence of the following visitors: Dr. William J. Chandler, Secretary of the State Society; Dr. Alex. Marcy and Luther M. Halsey, ex-Presidents of the State Society. Other visitors were: Drs. Senseman, Chavanne, Wilson, Oliphant, Heritage, Elliot, Stout and Steitz.

There was no scientific program and, owing to the illness of the retiring President, the President's address was omitted.

Camden, N. J., April 30, 1908.



**ESSEX COUNTY.****Frank W. Pinneo, M. D., Reporter.**

The ninety-second annual meeting of the Essex County Medical Society was held Tuesday evening, April 7, 1908, at the Woman's Club, East Orange. Two hundred and twenty-three members registered attendance. The President, Dr. Herman C. Bleyle, presided. The Secretary, Dr. Ralph H. Hunt, read the minutes of the last meeting. The Treasurer, Dr. Charles D. Bennett, reported for the year total receipts \$1,332, and present balance on hand, \$478.32.

The revised Constitution and By-Laws had been printed and were announced ready for distribution to every member. The Committee on Scientific Meetings reported four held during the year, with lectures by Dr. William M. Polk, Dr. Norman E. Ditman, Dr. Francis C. Wood and Prof. Byron C. Matthews.

The Committee on Public Health appointed last year reported "progress."

The Committee on Necrology reported the deaths of Dr. Aaron K. Baldwin of Newark, and Dr. Charles H. Bailey of Bloomfield. (The recent death of Dr. William Rosensohn of Orange should also have been included.)

The following new members were elected: Drs. Robert L. Bannister, Lewis N. Blank, Arthur C. Bush, Helen L. Carter, Edward L. Dodd, Richard H. Dieffenbach, H. S. Emil, Richard R. Granger, Albert S. Harden, J. Corwin Mabey, Floy McEwen, Harrison S. Martland, William D. Minningham, Peter F. Motzenbecker, William G. Nash, Thaddeus Paczkowski, Charles A. Rosenwasser, Howard S. Smith, Joseph J. Smith, Irving M. Vanderhoof, Rufus A. Van Voast, Jean F. Wolfs.

A resolution was passed endorsing the action of the Council against the repeal of the bill providing for "the incorporation of Pathological Associations organized for the Advancement of Medical Science."

The President's address then followed. His subject was "The Operative and Inoperative Treatment of Puerperal Eclampsia." The address was properly described by a member as "scholarly and comprehensive, based on the speaker's personal experience through many years of general practice." A vote of thanks was unanimously passed and a copy requested for publication in the State Society's JOURNAL.

A communication was read from the Judicial Council of the State Society, appealing for action by all the County Societies on (1) More support of the State JOURNAL by members, either direct or through the Reporters, items of scientific or other importance and papers read at medical societies' meetings; (2) the coöperation of all the society Reporters to this end; (3) contract practice; (4) post-graduate studies (on this recommending "the appointment of a committee to formulate a program best suited to the local society's needs and opportunities"); (5) the advisability of a publicity bureau (to further the interests of public health); (6) commending the union of lay and professional interests in the universal anti-tuberculosis campaign. The whole matter was referred to the Council.

The Committee on Scientific Meetings was ordered to be appointed by the President.

Article VI. of the By-Laws (on the Council) was amended to read: "shall constitute a board of medical ethics and judicial business," (adding) "with authority to employ counsel and to act for

the society in matters affecting the welfare of its members, either individually or collectively," reporting its action "in every instance to the society."

To secure obituary notices of our members promptly after death instead of only once a year as formerly, before we had a State Journal, a resolution was passed that "the Necrology Committee be requested, and is hereby authorized, to furnish to the Reporter obituary notices of members of this (Essex County) Society for publication in the JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY promptly after each death."

Responding to the request of the National Tuberculosis Association of the United States calling for a representation of this Society at the International Tuberculosis Congress at Washington in September it was resolved that a committee of seven for the purpose be appointed by the President.

The following were appointed Delegates to the State Society: Drs. Dill, Dodge, Dougherty, Foster, Hagen, Francis, Gage, Goodwin, Lippincott, Gray and Haussling. Dr. F. W. Pinneo was appointed Reporter to the State Society. The President was directed to appoint the Necrology Committee. The following officers for the ensuing year were elected: President, Dr. Wells P. Eagleton; Vice-President, Dr. Charles D. Bennett; Secretary, Dr. Ralph H. Hunt; Treasurer, Dr. Theo. W. Corwin. On the Council for three years, Drs. E. Z. Hawkes and H. W. Long.

A collation as usual followed and the meeting was declared to have been a success. The Orange members were especially pleased with the place of meeting.

**HUNTERDON COUNTY.****M. H. Leaver, M. D., Reporter.**

The annual meeting of the Hunterdon County Medical Society was called to order by the first Vice-President, Dr. T. B. Fulper, at 10 A. M., April 28th, in the Grand Jury room at Flemington.

Dr. W. A. Clark, Councilor for the Third District, was present and addressed the Society. Dr. G. N. Best read a witty and interesting paper on "Why Doctors Are Unpopular."

Measles and German measles were reported epidemic in parts of the county.

The following were elected officers for the ensuing year: President, Theo. B. Fulper, Junction; First Vice-President, Enoch Blackwell, Clinton; Second Vice-President, George Henry, Flemington; Secretary, O. H. Sproul, Flemington; Treasurer, Isaac S. Cramer, Flemington; Reporter, M. H. Leaver, Quakertown; Censors, Drs. Romine, Best and Brokaw; Delegate to the State Society, F. S. Grim, with E. D. Leidy, Flemington, as alternate; Chairmen of Sections: Practice, L. T. Salmon; Surgery, E. W. Clossen; Obstetrics, M. H. Leaver; Pathology, F. S. Grim; Therapeutics, George Henry.

After the discussion of various topics the Society adjourned to dine at the County House.

**PASSAIC COUNTY.**

The Passaic County Medical Society met in Paterson May 12th at 8.30. We have not yet received the official report from the Reporter, but thank Dr. Marsh, the Secretary for the report of the symposium on Medical Inspection of Schools, as given in the local paper. It will be found in other columns of this issue of the JOURNAL.

**SALEM COUNTY.****Henry Chavanne, M. D., Secretary.**

The annual meeting of the Salem County Medical Society was held in this city on the afternoon of May 6th, 1908, and was considered by those present as enjoyable and interesting. As corresponding members there sat with us Dr. Philip Marvel, District Councillor, who did not neglect to tell us, and especially the Secretary, of our responsibility and duty due the JOURNAL, and appealed for future contributions thereto; Dr. Strock, of Camden; Ellsmore Stites, J. H. Moore, C. E. Corson of Bridgeton, and George E. Reading, of Woodbury. Each had something of interest to contribute.

Dr. W. T. Hilliard read a paper entitled "Vesical Calculus—A Case." It indicated thought, research and observation in the preparation and called forth complimentary remarks and commendation from Dr. Marvel and others.

The officers elected are: Lester H. Hummel, President, Salem; J. H. Summerill, Vice-President, Pennsgrove; Henry Chavanne, Secretary-Treasurer, Salem; John F. Smith, Reporter, Salem; Censors, John F. Smith, B. F. Harris, W. H. James; Delegate to State Meeting, E. E. De Grofft.

Salem, May 12, 1908.

**SUSSEX COUNTY.****H. D. VanGaasbeek, M. D., Reporter.**

The regular annual meeting of the Sussex County Medical Society was held at the Cochran House, Newton, on Tuesday, May 12. There was a very small attendance. Although there were but few present, the meeting was a very interesting one. Dr. Harvey, Councillor for this district, was present and presented a specimen of ectopic gestation and also read a paper on "Ectopic Gestation and Its Management." The paper was a very excellent one, being of a very practical nature from the general practitioner's standpoint.

After recess the Vice-President of the Society, Dr. Jones, of Layton, read a paper on "Otitis Media and Its Treatment." This paper was listened to with great attention and was very thoroughly discussed.

The Society tendered a vote of thanks to Dr. Harvey for his very excellent paper. Dr. Hunt exhibited a few ancient works on anatomy in their original state, one on "Anatomy of the Human Body" printed in 1503; another on "Anatomy," written by Jacob Caspers, printed in 1530, and an "Anatomy," written by Eustachius, printed in 1722. These volumes were written in Latin and were all in a fine state of preservation. They were examined with great interest by the members present.

The following were elected as officers for the ensuing year: Dr. E. Jones, of Layton, President; Dr. Beatty, of Newton, Vice-President; Dr. S. Voorhees, of Newton, Secretary; Dr. E. Morrison, of Newton, Treasurer; Dr. H. D. VanGaasbeek, of Sussex, Reporter.

Dr. Bruno Hood was appointed Delegate to the State Society and Drs. Beatty and Jacobs as essayists. After a further general discussion the Society adjourned.

**THE NEWARK MEDICAL LEAGUE.****By Louis Weiss, M. D., Secretary.**

The Newark Medical League invited the profession of Essex County to hear an address by

Dr. Edward J. Ill, of Newark, on "Diseases of the Breast," on April 27, 1908, at its regular meeting in the parlors of the Continental Hotel, 452 Broad Street. The meeting was well attended. At the conclusion of the address Dr. Ill was given a standing vote of thanks, and escorted to the dining room, where a banquet was served in his honor.

Other physicians present were: Drs. Eagleton, Disbrow, English, Campbell, Washington, Hagar, Bruckner, Harden, Stahl, Kraker, Long, Buermann, Jedel, Price, Godkowsky, Lowy, Hood, Rachlin, Bacevicz, Teimer, Lippe and Weiss.

**RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.**

At the March meeting of the Board of Trustees of the Society for the Relief of Widows and Orphans of Medical Men of New Jersey, the following new members were elected: Drs. J. H. Lowrey, H. F. Cook, T. P. Boyle, C. H. Bruckner, E. W. Sprague, W. R. Granger, F. J. Kerns, of Newark; C. W. Buvinger, of East Orange, and C. Mills, of Morristown.

At the April meeting the following were elected: Drs. D. A. Kraker, W. D. Bleick, H. R. Widmer, I. M. Vanderhoff, R. H. Dieffenbach, J. J. Smith, H. S. Emil, of Newark, and E. N. Riggins, of Orange.

C. D. BENNETT, Secretary.

**NORTHWESTERN UNIVERSITY MEDICAL SCHOOL, CHICAGO, ILL.****Three New Professors Elected.**

Dr. John B. Murphy, of Chicago, has resigned as Professor of Surgery and co-head of the Department in Rush Medical College, and has accepted the Professorship of Surgery and head of the department in the Northwestern University Medical School and the position of attending surgeon at Mercy Hospital.

Dr. A. W. Meyer, of the University of Minnesota, formerly of Johns Hopkins, has accepted the Professorship of Anatomy, and Dr. A. N. Richards, of the College of Physicians and Surgeons of New York City, has been appointed Professor of Pharmacology in the Northwestern University Medical School.

**MEDICAL EMERGENCIES.****A Great Society for Coping with the Emergencies of Peace and War.**

The National Volunteer Emergency Service, instituted in 1900, has recently been reorganized by the election of Dr. James Evelyn Pilcher, the distinguished editor of *The Military Surgeon*, as its Director-General, and Dr. F. Elbert Davis, of New York, as its Adjutant General. Its work will be conducted along military lines, the details being worked out in three separate corps, a first-aid corps, a public-health corps, and a medical corps—the latter consisting of physicians, with rank from lieutenant to colonel, according to length of service, to whom are afforded special opportunities for emergency training. It includes among its personnel a large number of notable personages, and is rapidly extending its membership throughout the country. Full details regarding the service and its great work may be obtained by addressing Director General Pilcher at Carlisle, Pa.



## PROGRESS IN THE COUNCIL ON PHARMACY.

At its meeting in February, 1908, the Board of Trustees of the American Medical Association was requested by the Council on Pharmacy and Chemistry to appoint a body of clinicians to whom could be referred questions relating to therapeutics. In its communication to the Board the Council stated that in the course of its work the subcommittees had frequently encountered questions, a solution of which required the experience and opinions of clinical therapeutists. The suggestion of the Council was agreed to, and fifteen physicians and surgeons, all in active practice in various parts of the United States were elected as the staff of clinical consultants. This is the wisest and strongest move that has been made in connection with the Council. It will strengthen the confidence of the profession at large, as well as the pharmaceutical houses in the findings of the Council, whose efficiency will thereby be greatly increased. Why this step was not taken before by the Board of Trustees we have never been able to determine, and none of them has ever taken us into his or their confidence in regard to the matter. It is undoubtedly true that to many intelligent, high-toned and independent physicians it is distasteful and distinctly objectionable to be dictated to by a committee of pharmacists and chemists as to what drugs or remedies they could or could not ethically prescribe. The appointment of the fifteen eminent practitioners as clinical consultants entirely eliminates this objection, and we believe this action marks a long step forward in the progress of the Council. —*Jour. So. Carolina Med. Ass'n*, April, 1908.

## MEDICAL MEN IN PUBLIC OFFICE.

*Editorial Maryland Medical Journal, May, 1908.*

When one hears the familiar plaint that physicians are far less employed than lawyers in the public services one wishes that this subject might be submitted to a numerical test. It is quite true that the need of lawyers' services is more generally recognized and they are better paid. There is not anywhere a population civilized enough to rank the security of life and health above that of property. The most enlightened individuals attain to that wisdom only at long intervals and in the presence of extreme danger. Great communities are protected, indeed, by sanitary works which cost enormously, but in the minds of most persons the hygienic profits are incidental, and these expensive works commend themselves chiefly by their disguises of comfort and decency.

Relatively little of the coin so freely spent on sewerage and water supply passes through the hands of the medical profession, but that is because these works, though owing most of their modern perfection to the suggestion of medical science, require very little of medical men in the way of execution or administration. The fundamentals of public hygiene will probably never yield us considerable revenues, though not a few physicians are constantly and profitably employed on sewerage and water works. It is in the particulars of public-health work that physicians are sure to be more and more engaged. It costs much more to prevent disease than to cure it, but the dear public will not haggle at the price for a moment after the medical man makes good his profession. It is doubtful if any sort of profes-

sional service has ever advanced in public favor more rapidly than that which medicine has done in recent years. The number of physicians holding public office in Maryland at this time is not much, if at all, less than 8 per cent. of all those engaged in practice. About 175 physicians in Maryland are officers of State or local government, and hold office because they are physicians. If this estimate is correct, or nearly so, the character and the performance of so many medical men in public office are matters of some concern to the profession. The exercise of some concern would probably be wholesome to the Medical and Chirurgical Faculty. Full and complete information on this subject would certainly prove interesting, though it might not yield unalloyed satisfaction. Almost any one can make from memory a list of 50 or 60 physicians who hold public office, and in a number no greater than 50 or 60 one may find the virtues and vices of public servants exemplified quite as well as in an equal number of avowed politicians. At one end of the scale are examples of the highest professional character and ability engaged in public service, to the great credit of the profession; and at the other extreme one may find public office held unworthily by unworthy physicians, to the discredit, and some day, possibly, to the scandals of the profession. The average quality of professional service in public office is probably high, the average pay is certainly low, but the point of importance to the Faculty is that the extremes of character and performance, best and worst, can be illustrated with as small a number as 50. Such, at least, is the result of the reflections preliminary to this writing.

## FAITH HEALING IN MARYLAND.

An amendment to the medical practice act in Maryland has just been secured, requiring that hereafter Christian Scientists, faith healers or other sectarian practitioners, must be graduates of recognized medical colleges, and must pass the examination before the State Board of Medical Examiners, thereby obtaining certificates as physicians before being allowed to practice.

In commenting on the new law, the *Philadelphia Telegraph*, March 26, says editorially: "Maryland will have no more foolishness about faith healing, under any sort of sectarian denomination in her borders. No more use of mental or psychologic therapeutics by untrained, untaught practitioners; no more making a trade or profession of dealing with the mysteries of health and disease and the laws of Nature for hire by ignorant persons unqualified to handle such problems; no more 'absent treatment' for present payment in hers!"

"It seems to an unbiased mind a most just and reasonable law, not oppressive on any form of faith nor restrictive of any proper rights, but conceived for 'the greatest good of the greatest number.' The value of mental healing in various forms has been too often and too conclusively demonstrated to be utterly denied with any sort of reason; and where a healer's services are given gratis, either from a general spirit of Christian charity or from special motives of interest and affection, no one can properly protest against a well-meaning effort; but where persons sell their services for hire and make a practice of it, they should be compelled to give good guarantee of their qualifications and abilities."

**JOHNS HOPKINS HOSPITAL.****Maternity Mortality in the First 5000 Obstetrical Cases.**

Dr. F. G. Goldsborough reviews the record of Johns Hopkins Hospital (Bulletin, January, 1908) for the purpose of determining the maternal mortality as well as the relative seriousness of the various complications.

He says that their obstetrical department embraces two services, one an outdoor service, the other the house service. The first is somewhat larger, including 2750 cases, the second 2250 cases. Whenever possible abnormal cases are brought into the hospital. This explains the preponderance of fatalities among the hospital cases, among whom 48 out of the 55 deaths occurred.

Of the 5000 cases 4632 (92 per cent.) were delivered at term, while 369 (7 per cent.) failed to progress, a proportion of twelve to one. The causes of death were divided into groups: (1) Infections, (2) toxæmia, (3) hæmorrhages, (4) all other causes. In group one the relation of operative procedures to obstetrical infection is instructive. Thirteen per cent. were operative, with a mortality from infection of 1.37 per cent. Craniotomy, Cæsarean section were included.

Group 2. There were 16 deaths. Eclampsia was the most frequent form of toxæmia met with in this series. One-half of the fatalities from this cause occurred within twelve hours after admission to the hospital.

It is generally conceded that nephritis may give rise to intoxication during pregnancy independent of its association with eclampsia. Two such cases terminated fatally. Two fatal cases of vomiting of pregnancy also occurred.

Group 3. There were eight deaths in the 5000 cases attributable to excessive loss of blood—a mortality of 0.16 per cent. Viewed from the total number of deaths, of which they constituted 14.5 per cent., these fatalities demonstrate the importance of hæmorrhage as a cause of death in obstetrical practice, ranking third, being preceded by infection and toxæmia. The anatomical basis for the excessive loss of blood was most frequently placenta prævia, which was present in one-half of these cases.

Group 4 includes death from intestinal obstruction, typhoid fever, pneumonia, thrombosis, embolism and exophthalmic goitre.

Anæsthesia would seem to be accountable for but a single death in the 5000 cases, and in this instance ether was employed. It is indeed notable that no fatality from chloroform occurred, although it was given as a matter of routine to every patient at the end of the second stage of labor and to the point of complete anæsthesia when the vulva was fully distended. Abstracts of histories of selected cases are also given.—*Med. Rev. of Reviews.*

**Liability of Medical Colleges and Eleemosynary Institutions.**—The Court of Appeals of Georgia holds, in *Medical College of Georgia vs. Rushing*, that the Medical College of Georgia is not a public institution of the State because it is designated by law as a branch of the University of Georgia. It says that the State has no interest in the college and exercises no control over it. The college has simply received from the State comparatively small benefactions, for specific purposes. Therefore, the court concludes that the Medical College of Georgia is a private corpora-

tion, and that it is liable for the torts or wrongful acts of its agents in the conduct of its business and within the scope of their authority.

Moreover, while the college has been declared by the Supreme Court of Georgia to be a public eleemosynary institution, the Court of Appeals holds that public eleemosynary institutions are liable for the torts of their agents, the same as private business corporations, if they have any property, or are in receipt of any income, not exclusively devoted to public charity, out of which a judgment against them can be satisfied.

The question whether the patient is a charity patient or the institution is paid for his treatment, the court says, does not change the rule of liability, if, under the law, this class of institutions is liable at all. That a private person acting without compensation is in many cases liable for negligence is well settled. Where a hospital holds itself out for the treatment of the sick, whether this treatment is to be given as a gratuity, or is to be paid for, the implication arises that such treatment will be performed in a skillful manner, and such hospital or institution will be liable for unskilful or negligent treatment of the patient.

Again, the court says that, under the acts creating this college it is authorized to educate young men to practice the profession of medicine and surgery; but the hospital connected with it and managed by it, according to the allegation of the petition, is for the treatment of patients for a compensation. It is, therefore, not entirely a charitable institution, but derives a revenue from its business; and the court does not see why it should not be subject to the same rule of liability for the negligent conduct of its agents as any other private corporation.

Therefore, the court holds that where the college conducts a hospital for the treatment of the sick and injured for compensation, it is liable in damages for the unlawful and unauthorized mutilation of the remains of a patient who died at the hospital; and this would be true whether the college was compensated for the board, lodging and treatment of such patient, or not.—*Jour. A. M. A.*

**THE FINAL TRIUMPH OF SCIENTIFIC MEDICINE.**—Dr. N. Senn, of Chicago, reviewed the progress of medicine, especially of late years, and said that there is no country, with the possible exception of Japan, in which the medical profession has made more rapid strides than in the United States. As evidence of this he points out our many thoroughly equipped medical schools and laboratories, the activity of the profession as shown by the number of medical societies and the interest in their meetings, the reorganization of the American Medical Association and consequent greater unity of the profession, the higher status of American medical literature, and the higher standards in medical education and in the conditions of admission to practice. All these things, he says, have been brought about in a very short time by the voice and action of a hard-working united profession. The triumphs of preventive medicine are also reviewed from the discovery of vaccination, over a century ago, to the more recent acquisitions in the prophylaxis of tetanus, typhoid fever, cholera, yellow fever, malaria and bubonic plague. The medicine of the future is preventive medicine, and its final triumph will be the suppression of disease.



## PLACE OF THE 142d ANNUAL MEETING OF THE SOCIETY.



HOTEL CAPE MAY, CAPE MAY, N. J., JUNE 18-22.

## PATENT MEDICINES IN THE EIGHTEENTH CENTURY.

That we have progressed somewhat in medical legislation in the last century is shown by the following from "The Annals of Europe," 1739:

"Mrs. Joanna Stephens having discovered her cure for the stone and gravel, to the trustees named in the Act of Parliament for giving a reward upon the discovery thereof; and they having approved of the same, after a strict examination into its effects, the 5,000 pounds appointed by Parliament was paid to her and the following account of her method of preparing and giving her medicines was published by their order, viz.:

My medicines are a powder, a decoction, and pills. The powder consists of egg shells and snails, both calcined.

The decoction is made by boiling some herbs (together with a ball, which consists of soap). Surines cresses, burnt to a blackness and honey in water.

The pills consist of snails calcined, wild carrot seeds, burdock seeds, ashens keys, hips, and haws, all burnt to a blackness, soap and honey."

Then follow three octavo pages describing the method of preparing and dispensing the medicine. The snails should be prepared only in the months of May, June, July and August, but the egg shells may be prepared at any time. One difference, and it is the only one of importance, between this real patented medicine and many of the so-called patent medicines of to-day, lies in the fact that there is no secrecy in this ancient proprietary, for the herbs mentioned in connection with the decoction are given in description of the mode of preparation. They are camomile, fennel, parsley and burdock leaves. It is advised: "During the use of these medicines, the person ought to abstain from salt meats, red wines and milk,

drink few liquids, and use little exercise, that so the urine may be the more strongly impregnated with the medicines, and the longer retained in the bladder."—G. D. L.

## Union of Medical Societies.

The following action was recently taken by the Atlantic City Academy of Medicine:

WHEREAS, The Atlantic City Academy of Medicine having served its purpose in promoting frequent meetings for the interchange of medical thoughts and opinions and the consideration of matters of public good; and whereas, the improved railroad facilities now permit the out-of-town members of the Atlantic County Medical Society; and whereas, the existence of the Atlantic City Academy of Medicine tends to detract from the Atlantic County Medical Society, which is the connecting link, through the State Society, with the A. M. A.; and whereas, there exists in the minds of many of the members the feeling that two bodies composed of the same members and with the same objects, weakens both societies, be it therefore

*Resolved*, That we do hereby disband the Atlantic City Academy of Medicine, and that all moneys, books, properties, etc., now in the possession of the Atlantic City Academy of Medicine be transferred to the Atlantic County Medical Society.

THEODORE SENSEMAN, M. D., Reporter.

"Bone cases" should not be dressed too often after operation. The fine granulations which form are very liable to be pulled off with the removal of the packing.—*Amer. Jour. Surgery*.



# THE JOURNAL

OF THE

## Medical Society of New Jersey

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**JUNE, 1908.**


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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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### BOARD OF TRUSTEES MEETING

The annual meeting of the Board of Trustees of the Medical Society of New Jersey will be held in the Hotel Cape May, Cape May City, on Wednesday evening, June 17, 1908, at 8 o'clock. A full attendance of the members is earnestly requested. Several reports to be presented at the annual meeting of the State Society should be carefully considered, and other important business will be transacted.

**CHARLES J. KIPP, Chairman.**  
**DAVID C. ENGLISH, Secretary.**

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### OUR ANNUAL MEETING

**Hotel Cape May, Cape May City**  
**June 18-20, 1908**

This will be a very important meeting and we hope that every Permanent Delegate and every Annual Delegate will make a special effort to be present, and that an unusually large number of Associate Delegates will also attend, even if it is a long journey for members in the northern end of the State. Our members from the southern end have faithfully attended meetings held in the northern and central sections of the State, and we should reciprocate by attending meetings in their section. The excellent program, the great improvements at Cape May, the elegant new million-dollar hotel and the promised hospitality will repay the sacrifices some would make to attend.

Come, and bring the members of your family.

### OUR FIFTH YEAR.

With this issue of the JOURNAL we enter upon the fifth year of its existence. From information that comes to us directly, or through others, we believe there is a growing conviction, if not unanimous, of the wisdom of establishing a monthly journal in place of the old single volume of Transactions, and we are pleased to hear the judgment generally expressed that each year there has been an improvement in the character and value of the JOURNAL. We have tried to deserve the good opinion of our members and assure them that those in charge of the JOURNAL during the coming year will, more than ever, endeavor to make it worthy of their commendation. In order to do so, however, we must have more hearty coöperation, not only on the part of the secretaries and reporters of the County Societies, but also of every member who has important knowledge to convey, clinical cases to report or news concerning any matters that are of interest to, or will benefit, his fellow-members and tend to advance the science and art of the profession. We wish especially this year to have the JOURNAL set forth, as never before, the thought and work of New Jersey physicians. We have a large number of our members engaged in hospital work and many specialists—they must have much to communicate. We desire to hear frequently from them, but we also wish the larger number of general practitioners, even the humble and modest village doctors who have anything of interest to communicate, to understand that we recognize the good work they are doing and will welcome their coöperation.

We desire to have every meeting of our County Societies fully and *promptly* reported; not only titles of all papers read, but briefly the main points in the discussion of them, and such papers as are of decided value—containing new thought and practical suggestions—should be sent to the JOURNAL for publication; also reports of clinical cases presented; and, *as promptly as possible*, report of the death of any member with brief obituary notice. We also request



reports of local medical societies or clubs, or kindred societies whenever in the latter anything occurs that is of special interest to medical men. Please understand also that our Correspondence and Personal columns are open to all our members, the former for the expression of your views on all matters concerning the profession, and the latter for personal items of interest concerning medical men.

Will You help us in our effort to serve you and the Medical Society of New Jersey?

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### TO THE SECRETARIES AND REPORTERS OF COUNTY SOCIETIES.

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We commend the following editorial in the May issue of the *West Virginia Medical Journal* as worthy your careful consideration and action:

"In a number of the states meetings of the County Society Secretaries have been held, for the purpose of reading papers touching questions of organization, and discussing matters involving the common interests of the local societies. \* \* \* A number of these meetings have been largely attended, and have undoubtedly been productive of much good in exciting greater interest in the work of the local society, in informing the secretary how good things may be best done, and in stimulating him to exert himself to bring his society up to a level with the best.

If the profession is to be more fully organized, if the State Association is to grow in strength of numbers and efficient workers, if it is to be a factor in securing good legislation for the people, these results must come chiefly through the efforts of the local secretaries, the State Association secretary and the *Journal*. The latter will never be as fully representative of the organized profession as it should be unless the secretaries show greater interest in its betterment. \* \* \* A number of secretaries have done excellent work for the *Journal*, but from many we have failed to even have answers to our inquiries.

We therefore take the liberty of urging every secretary in the state to attend the coming annual session, when a meeting can be called, apart from the general meetings of the Association, for a discussion of the questions alluded to above, and if decided to be advisable, a formal program can be arranged for the next year. If the secretary can not possibly be present, let the society appoint the President or some other member to represent him. We are confident that such a meeting will be productive of good."

We most heartily endorse the above and believe the suggestions are as applicable to New Jersey as to West Virginia. We urge every secretary and reporter to attend the annual meeting of the State Society at Cape

May, and suggest that they hold a joint meeting to discuss the propriety of holding a brief annual joint meeting during the sessions of the State Society. We need to discuss the relations of these two officers to each other and to the *JOURNAL*.

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### THE COUNTY SOCIETIES AND THE HOSPITALS.

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We call attention to the action taken by the Hudson County Medical Society, on motion of Dr. A. P. Hasking, and commend it to the consideration of the other county societies which have hospitals within their bounds:

*Resolved*, That in accordance with Section 6 of the By-Laws of the Hudson County Medical Society, the Secretary be empowered to invite the senior interne of the various hospitals of the county, during his term of service as such, to attend the meetings of this Society, and in the event of the senior interne being unable to accept, the next in order of seniority shall be invited.

This, we believe, is calculated to arouse interest among the internes in the County, State and National Societies, and insure their joining these organizations when starting in professional life. It will also tend to insure the report of interesting hospital cases. This latter result will help the editor of the *JOURNAL* to secure what he has often asked for—reports of the work of the medical men of New Jersey, and its results, in the Hospitals of our State, that the *JOURNAL* may thus be enabled properly to set it forth for the credit of the profession and the State and the advancement of medical science. We hope, therefore, that every county society will follow Hudson's example for their, our and the profession's good; then earnestly carry out this good work, and we ask every senior interne to prepare such reports for the county society—and this *JOURNAL*—as will reflect credit on himself, the Hospital and the profession. We shall be most happy to receive all such reports and give them insertion in the *JOURNAL*.

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The INDEX of VOLUME IV. will be issued with the July *JOURNAL*.

## A GOOD ANNUAL MEETING.

Through the courtesy of the Committee, the editor had the pleasure of attending, at the Hotel Cape May, on May 9th, the meeting of the Committee of Arrangements for the annual meeting in June at Cape May. Drs. Strock, Chairman, Mecray, senior and junior, Hollingshead, Marcy, Stout, President Ill and Secretary Chandler, of the Committee, were present, as were also Vice-President St. John and Dr. Anna M. Hand. We found that the hotel was all that it had been represented—an ideal one for our meeting.

The manager agreed to give the members attending, their guests and the ladies accompanying them, a banquet on Friday, the 19th, at 7 o'clock P. M., which will be followed by brief speeches, a vaudeville entertainment and dancing. There will be an exhibition of the work of the life-saving service on the following day. There will be other special entertainments for the ladies, including a steam launch trip given by the Yacht Club and an afternoon tea at their rooms. Dr. Hand and the wives of the members of the Committee will care for the ladies' entertainment.

Judging from the good work of this Committee in planning for the comfort and enjoyment of those who attend, and the reports from the Scientific and other Committees this year's meeting should be exceedingly enjoyable and profitable.

## MEDICAL DEFENSE.

Special attention is called to the fact that action on the report of the Committee on Medical Defense—Dr. W. G. Schauffler, chairman—which was presented at the last annual meeting of our Society, was deferred until this year's meeting, in order that our members might thoroughly consider the advisability of adopting this scheme for their protection against malpractice suits; and, if the medical defense of members is adopted, to decide whether the plan proposed should be approved or some better, more practical method could be devised for carrying it into effect.

We hope that those who expect to attend the annual meeting this year will give this matter their careful consideration and come

prepared to discuss it intelligently and briefly, and offer practical suggestions. Several State Societies, some with more and one with less members than ours, have adopted the plan which, from reports received, seems thus far to have given good results, in that it has prevented or greatly lessened the number of prosecutions and of persecutions from spite and black-mailing attempts.

Elsewhere in this issue of the JOURNAL will be found the plan recently proposed by the Committee on Medical Defense of the Kentucky State Medical Society, and we also reprint Dr. Schauffler's report, in order that they may be compared and possibly lead to the suggestion of even better working methods than either, if the Society decides to adopt any plan of Medical Defense.

## THE HEALTH INTERESTS OF OUR STATE.

### Are They Protected or Jeopardized?

We had hoped to say something in this month's JOURNAL in commendation of the new State Board of Health, but from conflicting reports which have come to us we do not feel justified in expressing any decided opinion at present. There were some able men on the old board, most of whom have served the State well for several years without any compensation and some with inadequate salaries, who have not been appointed on the new board. We feared that the new bill, with \$2,000 salary per member, with six members to be appointed by the Governor subject to the Senate's approval, had been suggested by the politicians and might lead to political manipulation in its execution; we are not yet prepared to say that our fears were unfounded.

We have always believed, and we believe more fully than ever to-day, that the guarding of the health and the lives of the citizens of New Jersey is one of the most sacred duties of the State, and that party politics should never be considered in the selection of men and methods; that these sacred interests should not be jeopardized



by the appointment of men who are not versed in sanitary science and who have had little if any experience in public health work, and that for the greatest efficiency at least three of the members should be physicians who are able sanitarians. They certainly ought to understand best the laws and conditions of health and disease. We are now inclined to believe that a great mistake was made in the passage of Senate Bill No. 61; that the adoption of the bill drawn by Judge Lanning would have been far better, because more in accord with recent methods of work that are giving excellent results in other States. We give on page 38 of the JOURNAL these bills and reserve further comment on them until a subsequent issue of our JOURNAL.

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### LODGE PRACTICE.

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In this issue of the JOURNAL we give the paper of Dr. G. E. Holtzapple, of York, Pa., read at the annual meeting of the Medical Society of the State of Pennsylvania, on "Lodge Practice." The doctor gives considerable valuable statistical data, and his arguments from the figures and facts present the subject so fully and well that we have deemed it worthy a place in our JOURNAL, and commend it to the careful consideration of our members. It is to be regretted that more than one-half of those to whom he applied for information failed to respond—a lack of professional courtesy far too common—but it is noteworthy that one-half of those who did answer reported no lodge practice within their bounds. The length of the paper compels us to omit his long statistical table with summary, which contains some almost incredible statements of facts, *e. g.*, that one lodge doctor was willing to go ten miles for the contract price of 3 cents per member per week; also that one-half the physicians in one county do family practice by contract for \$1 and \$2 per month. Some lodges pay from 2 to 4 cents per capita per week, a few 25 cents to \$1 per month, the majority from \$1 to \$3 per year; one pays

\$300 per year for attendance on all members and one pays "regular fees."

There is probably nothing that so degrades and demoralizes the profession and has been more responsible for lessened public esteem and the consequent weakened influence of its members. Nothing has so encouraged quackery as the system of cheap service rendered lodges and business corporations. It has led insurance companies to seek cheap doctors and municipal authorities to pay inadequate salaries to city physicians. It seems incredible and yet this paper states it as an actual fact that there are some medical men who have accepted the offer made by lodges of two cents *per capita* per week—less than one-half what they would pay their bootblacks for a "shine."

One doctor in discussing Dr. Holtzapple's paper, said a member of his own county medical society actually paid from his own pocket the initiation fees of a number of candidates so as to insure their votes in his behalf. The same doctor, we believe wisely, urged the establishment in medical colleges of a course of lectures on the business side of the medical profession. He also argued that the county medical societies should take positive action regarding this evil and should enforce their decisions. In Pennsylvania seven county societies have by-laws preventing lodge practice, others have passed resolutions condemning it and one requires the contract doctor to charge regular fees.

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There is no doubt that the correction of the great evil of contract practice requires deliberate and careful consideration which shall lead to the adoption of some remedy that will be just and effective. The one county society reported above as requiring the contract doctor to charge regular fees is a step in the right direction if lessening the evil rather than its prevention is the end sought; but is it adequate, will it be honestly carried out? And is it just to the members of the profession in the community where it is practiced? We will not now argue the question, but merely state only one supposable case to awaken thought which may help

in arriving at a wise decision, when the time for action comes: A lodge or railroad company or other large business corporation engages a doctor to attend its members or employees, say at regular rates, for visits and office calls; one-third or less proportion of said members or employees have had for several months or years another physician of the same community as their family physician, who has rendered faithful and satisfactory service. Is it wise or just for the contract doctor to enter into contract that will do injustice to their family physicians by taking away their patients; and, if so, where is the pecuniary advantage to the patients if regular rates are charged, and how are the life and health interests of the family protected if they are handed over by the wholesale to the care and treatment of possibly a less able practitioner, who knows nothing of the family history and idiosyncrasies of its members?

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### THE TRAINED NURSE.

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There is no doubt that the trained nurse who knows her business and recognizes her position in its relations to the physician, the patient and the family, has proven one of the greatest blessings to each of the above parties that recent years have brought us. The training schools connected with some of our leading hospitals, and such others as the Philadelphia School for Nurses and the Chautauqua School of Nursing are doing a grand work. That there is false teaching which is calculated to do much harm to all the parties concerned there is no doubt, such for example, as that taught by a recent writer on "The Evolution of the Nurse," that "The domination of the doctor and the man must cease when he leaves the sick-room." A sad day will it be for the doctor, and a far worse one for the patients, when such teaching prevails. Far better that the nurse should be slightly deficient in knowledge than that she knows too much about diagnosing and treating disease. The nurse should be taught, and should observe the

teaching, that she is to carry out the doctor's orders and report to him her observations of the patient, that she should attempt to make no diagnosis, give no medicines not ordered by the doctor and make no suggestions concerning the doctor and his treatment to the patient or family.

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We have recently received an attractively printed pamphlet, issued by the Philadelphia School for Nurses, containing the address given by a member of our Society—Dr. B. D. Evans, of Morris Plains—to the last graduating class of that institution. It abounds in good, practical common-sense advice. One of the many good points in it is worthy of special consideration—that nursing should not be on a strictly commercial basis—that the nurse should not forget the fact that the poor must be cared for, and that her services, like those of the physician, should sometimes be given gratuitously. We should at least have some nurses in all our cities and towns, perhaps not so thoroughly trained, though intelligent enough to understand the doctor's directions and loyal enough to faithfully carry out his orders, whose compensation would be sufficiently moderate to permit the patients of moderate means to have their kind, gentle and helpful ministrations. In cases where poverty precludes compensation by the sufferers, and there are no nurses who volunteer to serve without compensation, such nurses might be provided through the churches or some charity organization, as is done in a few towns.

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**Remember the date, the time and  
the place of the  
ANNUAL MEETING  
of the**

**MEDICAL SOCIETY OF NEW JERSEY**

**June 18, 19, 20, 1908**

**HOTEL CAPE MAY, CAPE MAY CITY**

**The Board of Trustees meets Wednesday evening, June 17th, at 8 o'clock.**

**The House of Delegates meets on Thursday, the 18th, at 10.30 A. M.**

**The first General Session will be held on Thursday, the 18th, at 3 o'clock, P.M.**



## ANNUAL MEETING PROGRAM.

The full program, with announcements by the Secretary and Committee of Arrangements, will be sent, in booklet form to each member early in June. Below is the list of orations, papers, etc., that will be presented:

Annual Address of President

Edward J. Ill, Newark

Oration in Medicine

Wm. K. Newton, Paterson

Oration in Surgery

Maurice H. Richardson, Boston, Mass.

Remote Pain Following Abdominal Operations

William E. Darnall, Atlantic City

Discussion opened by J. S. Baer, Camden  
and Elsmore Stites, Bridgeton

Reflex Gastric Symptoms, a Factor in Surgical Disease  
of the Abdomen

John P. Reilly, Elizabeth

Discussion opened by W. F. Faison, Jersey City

Report of a Case of Excision of the Stomach for  
Carcinoma

Edward Staehlin, Newark

Discussion opened by O. R. Blanchard, Jersey City

A Resumé of Modern Methods of Treatment for Pos-  
terior Displacements of the Uterus

J. Watson Martindale, Camden

Discussion opened by Edward Staehlin, Newark,  
and Archibald F. Alexander, Paterson

Diagnostic Importance of Vomiting in Childhood

Arthur Stern, Elizabeth

Synopsis. Cerebral vomiting, gastroenteric and periton-  
eal vomiting, prodromal and initial vomiting in acute  
infections, vomiting in intoxications, vomiting after ex-  
citement, vomiting in cardiac insufficiency, vomiting in  
cases of general neuropathy, and vomiting from miscel-  
laneous causes.

Discussion opened by Henry L. Coit, Newark  
and P. DuB. Bunting, Elizabeth

Endothelioma of the Pleura

Henry S. Patterson, New York

Discussion opened by Frank R. Sandt, Paterson  
and B. von D. Hedges, Plainfield

Acute Anterior Poliomyelitis, with Special Reference  
to the Recent Epidemic

David T. Bowden, Paterson

Discussion opened by H. J. Bogardus, Jersey City  
and S. A. Twinch, Newark

The Importance of Studying the Condition of the Heart  
Muscle in Various Diseases

Hobart A. Hare, Philadelphia, Pa.

Discussion opened by Philip Marvel, Atlantic City  
and Martin J. Synnott, Montclair

Observations on Bronchial Asthma

J. Hervey Buchanan, North Plainfield

Discussion opened by F. C. Ard, Plainfield  
and C. P. R. Fisher, Bound Brook

The Influence of Overweight and Underweight on  
Vitality

Brandreth Symonds, Mutual Life  
Insurance Co., N. Y.

Discussion opened by Joseph C. Young, Newark  
and Alfred A. Woodhull, Princeton

The Psychic Element in Medical Practice

Linn Emerson, Orange

Synopsis. The practice of medicine as much an art as a  
science. Medical art in early times. Undue promi-  
nence of the material side during the past century. Re-  
cent revival of psychic methods. Analysis of present  
tendencies. Only men temperamentally fitted should be  
encouraged to begin the study of medicine. Mental vs.  
material methods.

Discussion opened by T. N. Gray, East Orange  
and W. M. Leszynsky, New York.

Methods of Preparing Specimens for Laboratory Ex-  
aminations, with a Brief Resumé of the Value of  
Chemical and Laboratory Methods in Diagnosis.

Harry A. Cossitt, Morris Plains

Discussion opened by Thomas P. Prout, Summit

Intestinal Obstruction

Robert M. Curtis, Paterson

Discussion opened by G. Howard McFadden, Hackensack  
and T. W. Harvey, Orange

Present Status of the Milk Problem

Alexander McAlister, Camden

Discussion opened by H. H. Sherk and J. W. Fithian  
Camden

Tetanus

J. Harris Underwood, Woodbury

Discussion opened by Thos. B. Lee, Camden  
and Geo. E. Reading, Woodbury

Incidence of Hydatid Disease in North America, with  
Report of Three Cases

G. N. J. Sommer, Trenton

The Therapeutic Application of Dry Hot Air

Elton S. Corson, Bridgeton

Synopsis. Not generally scientifically understood and  
applied. Modes of application. Physiological action.  
Effect in special diseases. Contraindications. General  
considerations.

Discussion opened by Joseph Tomlinson and  
E. S. Fogg, Bridgeton

The Drink Habit and its Treatment

Charles A. Rosenwasser, Newark

Synopsis. How established. Degrees of alcoholic crav-  
ing. Classification of drinkers. Diagnosis. Prevention.  
Difficulties attending cure. Possibility and impossi-  
bility of cure. Treatment: psychic; medicinal; hygienic;  
dietetic. Possibility and importance of treatment with-  
out detention. Importance of systematic treatment.  
Importance of co-operation of family. How to guard  
against relapse. Treatment by the State. The proposed  
State Hospital for Inebriates.

Discussion opened by Livingston S. Hinckley, Newark,  
and Alex. Marcy, Jr., Riverton

A brief Review of Hernia, as understood and treated at different epochs by the past and present masters of surgery.

Thomas H. Mackenzie, Trenton

Synopsis. The evolution and trend of medical thought from the most remote periods to the present time. The truss as a retaining and curative apparatus. A brief description of the crude operations practiced by ancient surgeons in this country and abroad. The pathology of the disease. Predisposing and exciting causes. Contrasting the efficiency of modern methods with those of the ancients. The brilliant results obtained by the present-day methods.

#### Clinical Features and Treatment of Acute Perforating Gastric and Duodenal Ulcer

Ellsworth Eliot, Jr., New York

Discussion opened by Gordon K. Dickinson, Jersey City and James S. Brown, Montclair

**It is desirable that every County Society shall be well represented at the Annual Meeting, June 18-20, Cape May. The officers will be glad to see YOU there and have your help in the endeavor to make it the best annual meeting we have ever held.**

#### MEDICAL DEFENSE OF MEMBERS.

**Report of the Committee on Medical Defense at the 1907 Annual Meeting, action on which was deferred until this year's meeting.**

It is a self-evident fact that all members of the medical profession are liable at any time to be threatened with prosecution, as the result of actual or alleged carelessness in the treatment of cases. At other times unscrupulous individuals make threats of prosecution for the purpose of blackmail, or to avoid the payment of just bills.

The handling of any such case by the individual physician entails expense of time and worry and many cases go against the physician through his lack of knowledge of legal procedure.

To avoid this, many physicians insure themselves in companies assuming such liabilities, at a moderate annual fee, usually \$10.00. But in several states the responsibility for such medical defense of members in good and regular standing is assumed by the state medical society, with the result that there are fewer prosecutions threatened, and the individual physician is given a greater sense of security in the practice of his profession.

The adoption of such means of medical defense involves the appointment of suitable legal counsel, who is retained by the year, and the provision of means from the treasury of the Society to pay the necessary fees.

Your Committee therefore begs leave to submit its report in the form of the following recommendations:

1.—That the Medical Society of New Jersey assume the defense of any and all members threatened with prosecution for malpractice, provided they be at that time in good and regular standing in their county societies.

2.—That the Council of the Society select an-

nually as counsel some well-known lawyer in the State of New Jersey qualified to act as such, and retain his services at a proper fee.

3.—That the necessary expense so incurred be paid from the Society's treasury.

4.—That the defense be carried out on the following lines:

Every member of the Medical Society of New Jersey who has paid all dues, assessments or other charges assessed or levied by the Medical Society of New Jersey for the year of 1907 shall be entitled to receive, without expense, upon application therefor, the services of an attorney and counselor-at-law in any action for malpractice brought against such member in any court within the State of New Jersey, on the following conditions, and not otherwise:

First—Any member desiring to apply for malpractice defense hereby provided, shall immediately upon receipt thereof send to the Secretary of the Medical Society of New Jersey any letter, process of court or other evidence of threatened litigation in connection with such malpractice case.

Second—It shall be the duty of the Secretary to forthwith examine the financial records of the Medical Society of New Jersey, and if such member so applying is found to have paid all arrears, dues or other charges due the Medical Society of New Jersey for the year 1907, he shall certify those facts to the counsel of the Medical Society of New Jersey and forthwith send to such counsel the papers received from the applicant for defense, and said Secretary shall forthwith return to the applicant, if he shall find that such applicant has paid all arrearages due the Medical Society of New Jersey, a formal application for defense containing authority for the said Society, through its attorney, to defend the action and granting to the Society and its attorney sole power to conduct the defense thereof, and agreeing not to compromise or settle said claim for damages for said alleged malpractice without the consent of the Medical Society or its attorney. The said applicant shall furnish and return to the Secretary with his application duly executed, a full, accurate and complete history of his treatment of the case of which the alleged malpractice arose, giving dates, names of witnesses, nurses and other attendants, all of which information shall, upon its receipt by him, be forwarded by the Secretary of the Medical Society of New Jersey to the counsel of the Society.

Third—If, on the other hand, the Secretary finds that any member so applying has not paid all arrearages as herein specified, then, and in that case, he shall return at once to the applicant all papers or memoranda received by him from said applicant, together with a statement that he is not entitled to defense, and the reason therefor.

Fourth—It is further understood between each and every member of the Medical Society of New Jersey and the Medical Society of New Jersey, that under no conditions or contingency will the Medical Society of New Jersey pay any sums awarded in settlement, compromise, or by verdict or otherwise against any member sued for alleged malpractice, and each member in applying for the services of the attorney of the Society in any malpractice case, shall agree not to obligate in any manner the Medical Society of New Jersey or any persons connected therewith, to the payment of any sums whatsoever for any purpose.



Fifth—If the counsel of the Medical Society of New Jersey, as hereinbefore provided for, finds on investigation that the party applying to such Society for defense, is guilty of an alleged malpractice, and that a judgment will probably lie against such applicant, then such applicant shall not have the aid of the Medical Society of New Jersey in his defense.

APPLICATION FOR MALPRACTICE DEFENSE.  
To the Medical Society of New Jersey,  
South Orange, N. J.

The undersigned, residing at \_\_\_\_\_ in the County of \_\_\_\_\_, New Jersey, and being a member of the Medical Society of New Jersey and of the Medical Society of the County of \_\_\_\_\_, hereby applies for defense in an alleged action for malpractice brought against him by \_\_\_\_\_ of \_\_\_\_\_, New Jersey.

For and in consideration of this defense the undersigned agrees not to compromise or adjust this claim without the consent of the Medical Society of New Jersey or its attorney. He renounces his own and places in the Medical Society of New Jersey full power to defend said action and look after his interests.

The undersigned agrees not to obligate the said Society to the payment of any money whatsoever for any purpose, and will help, aid and assist and cooperate with the Medical Society of New Jersey and its attorney in the defense of said action, in the securing of witnesses, in the execution of any papers properly presented to the undersigned for signature and execution, and do all things necessary and proper in the defense of the above action.

That the names of all witnesses, physicians and nurses who have any knowledge of the circumstances in this action are as follows:

- ..... Residing .....
- ..... Residing .....
- ..... Residing .....
- ..... Residing .....
- ..... Residing .....

That the undersigned has hereto annexed a true, accurate and complete statement of the treatment by him of the patient, and a complete history as far as the undersigned is able to give it, of any other treatment received by the patient, giving the dates and places of all examinations, treatments or operations by himself or others.

The undersigned encloses herewith all papers, receipts, bills or other documents received by the undersigned in connection with this action.

Dated, \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_, at the County of \_\_\_\_\_

..... Applicant.

We have carefully investigated measures taken by other state medical societies to protect their members in alleged malpractice suits, and we have found nothing better than the course pursued by the Medical Society of the State of New York, which we have incorporated into this report.

All of which is respectfully submitted,  
T. N. GRAY,  
W. P. MELCHER,  
W. G. SCHAUFFLER, Chairman.

FOR RAILROAD FARES TO CAPE MAY ANNUAL MEETING SEE COMMUNICATION ON PAGE 40. GO WEDNESDAY, JUNE 17, OR BY EARLY TRAIN THE NEXT MORNING.

MEDICAL DEFENSE IN ILLINOIS.

Plan inaugurated by the Chicago Medical Society and subsequently by the Illinois State Medical Society, as reported by the Assistant Secretary of the American Medical Association.

The plan was inaugurated on January 1, 1903, by the Council of the Chicago Medical Society, which set aside \$1 out of the dues of each member (the dues are \$5).

"A contract was made with a prominent firm of attorneys, the society agreeing to pay an annual retainer of \$500 to the attorneys, who in turn agreed to act as the legal advisers for any members of the society against whom malpractice suits might be brought. The attorneys agreed to furnish the necessary legal services up to the time of actual appearance in court. For court services each physician was to make such arrangements as he wished, but the firm agreed to act as court lawyers for any member of the society at half their usual fees. As experience has shown, it is almost never necessary for the attorneys for the society to appear in court as few, if any, of these cases ever go to trial if a vigorous defense is instituted.

At the annual meeting of the Council, held October 11, 1904, the medico-legal committee reported that twenty cases had been brought to its attention during the past year. Of these, suit had been entered before the organization of the committee in five cases, in one of which a verdict against the physician had been secured. Twelve of the cases were not heard from after the lawyers for the plaintiff learned that the cases would be defended by the Chicago Medical Society and its attorneys. Of the other eight cases, two were of such a nature as not to come within the scope of the committee, while the remaining six were at that time still pending. In the same report the committee says: "The \$1 a year dues is proving ample for the work of the committee up to the present time. In fact, we have now a fund of \$1,235 in the bank drawing three per cent. interest. We hope to so manage the finances of the committee that in a few years we will have a material fund, and possibly will be able to render more financial assistance than is possible at the present time. We are even considering the policy of paying judgments at the proper time. \* \* \*

During the years 1906 and 1907, the plan of medical defense was extended to the State Society, by the organization of a medico-legal committee, consisting of one member from each of the county societies except Chicago, and three members from this society. The members of our local medico-legal committee were made the members of the State committee for our county. A per capita assessment of \$1 per member per year was levied on the membership of the State Society. This gives the State Society an annual fund of about \$5,000. Our local committee in the spring of 1907 reported that during the year the committee had considered seventy-nine items, using the word items advisably as they could not be designated as suits, these items varying all the way from threats to warmly contested suits in the court. In four cases the committee won after a legal fight in court. Eight cases were definitely disposed of by the committee. The remainder, which consisted of proceedings all the way from threats to actual institution of suits, were still pending, but the chairman of the committee stated that nine-tenths of them unquestionably would

never be heard of again. The report closes as follows: "So far as the work of the committee in Cook county and the State is concerned there has been no judgment rendered against a doctor for malpractice in Cook county, and no compromise has been made by the committee in any malpractice cases in four years except in three instances, one of which, although a trivial matter, was clearly a malpractice suit in which liability was certain and in which compromise was advised." As the membership of the society now amounts to about 5,000 members, I think you will see that this is a remarkable record. \* \* \*

As to the working of the plan in the State, the committee found during the last year, much to its surprise, that malpractice and damage suits against physicians are more frequent in country districts than in the city. It has also been found that when it is once known that the organized profession, represented by thoroughly competent lawyers, are behind a defense the case never goes very far, unless there is real cause for action. As you doubtless know, nine-tenths of the malpractice cases are instituted by shyster lawyers on a contingent fee basis and are worked up systematically. They do not come from the voluntary action of the patients themselves. One other point is worthy of mention. Many of our members who formerly held policies in guarantee companies as protection against damage suits at a cost of from \$15 to \$30 a year, have surrendered this policy, as they say the protection furnished by the society at \$1 per year is better.—*From the West Virginia Medical Journal.*

## MEDICAL DEFENSE IN KENTUCKY.

### Report of Committee of the Kentucky State Medical Society on Medical Defense.

#### LETTER OF TRANSMITTAL.

The Committee on Medical Defense, appointed at the last meeting of the Kentucky State Medical Society, realizing the great importance of their duties, have investigated the subject thoroughly and have the accompanying articles to offer the County Societies for their adoption.

In presenting this summary of their work, the committee desires to state that this matter was considered from three points, viz.:

First—Will the formation of a defense union be beneficial to the physicians of Kentucky?

Second—Is such a Union practicable, and if so, what are the minimum rates necessary for good results?

Third—Can this Union have legal standing without coming within the regulations of the insurance laws?

The committee read carefully the reports of similar organizations of England, Canada and various parts of the United States, and found that malpractice suits had been greatly decreased in number in these countries and States, that satisfactory protection had been given the members and that, in all cases, the benefits had been undoubted.

From this same research, the committee believe that the work can be properly carried on for the amounts mentioned, namely—\$5 for an entrance fee and \$1 per year from each member as dues.

As to the legal standing of the Union, the best lawyers in the State have been consulted and assurance has been given the committee that the articles now presented to the County Societies

are in perfect accordance with the laws of Kentucky.

The various insurance companies charge \$15 for the protection which the Defense Union will give for \$1 (the entrance fee, \$5, being paid once only), and, therefore, the committee does not expect anything other than the unanimous adoption of their report by the County Societies.

Very respectfully submitted,

Cuthbert Thompson, Chairman.

Oscar E. Bloch, Secretary.

Louisville, Ky., April 14, 1908.

#### PROPOSED CONSTITUTION.

I. The name of this Association shall be the Medical Defense branch of the Kentucky State Medical Association, and shall co-operate therewith as herein provided.

II. The object of this branch Association shall be the defense of its members against unjust suits for malpractice.

III. All members of the State Medical Association, and all future members on election, who wish to be members of this Defense Association shall pay an initiation fee of \$5, and yearly dues of \$1, to be collected by the Treasurer of the County Societies of the Kentucky State Medical Association, and forwarded by him to the Treasurer of this Defense Association.

IV. The officers of this Association shall be a Chairman, a Secretary-Treasurer and four other members (one of whom shall be the President of the State Medical Association) together forming an executive committee, and they shall have general charge of its affairs, who shall report at the yearly meeting of the State Association to the House of Delegates. The members of said committee shall be elected by the House of Delegates for ten years, except of those first appointed one shall serve ten years and one shall serve eight years and one shall serve six years and one shall serve four years and one shall serve two years.

V. The assistance in defense as herein provided shall be only of such members of the Kentucky State Medical Association as are in good standing, and who shall have paid the initiation fee and the yearly dues for this special purpose. Neglect to pay the dues at the proper time shall forfeit all claim on this Association for any protection which it can afford and from membership in this Association. No doctor shall be defended for any action unless he was a member of the Protective Association and a resident of Kentucky during the time when the alleged malpractice was committed, and shall comply with the regulations herein and hereafter lawfully made.

VI. It shall be the duty of any member of this Association threatened with suit for malpractice to immediately notify the President of the County Society, who shall at once send him an application blank for names of witnesses, etc., and on receipt of this blank, properly filled in, the President shall immediately call his county committee and investigate.

VII. The President of the County Society in which the defendant resides, the Councilor of the Kentucky State Medical Association from the district, and a doctor (who must be a member of the Protective Association), chosen by the defendant, shall form a County Committee which shall investigate all cases of alleged malpractice. If for any reason the President or Councilor can not act, the Secretary and Senior Delegate of the County Society shall act in his or their place



in order. This committee shall examine the defendant and his witnesses, if necessary, under oath. If this committee agree that it is a case to be defended, it shall so report to the Chairman of the Defense Association, who shall immediately so notify the Executive Committee of this Association. If this County Committee should decide it is not a case to be defended, the defendant doctor can appeal to the Executive Committee of the Medical Protective Association of the Kentucky State Medical Association, and it shall in all cases have the final decision whether the case is to be defended or not. The findings of these committees, if unfavorable, are to be communicated to the defendant alone.

VIII. The only liability of the Medical Protective Association will be for the fee of the consultant lawyer which they have chosen, a reasonable fixed fee to be agreed to in advance of the local lawyer selected by the doctor, and the legally taxed court costs—all other expenses of the case to be borne by the defendant. Provided, however, that if the income of the Association for any one year has been exhausted by or appropriated for contracts, in defense of members, the Association shall have the right of apportioning dues to the expense of defense to be borne by it upon all cases subsequently arising until such dues shall again be sufficient to pay as before indicated; and, provided, further, that no officer or member of this Association shall be responsible individually for the whole or any part, or for any assessment upon any of the obligations which this Association, or its officers for it, are hereby authorized to assume.

IX. It shall be the duty of every member of this Association to aid the Association in every legitimate manner.

X. It shall be the duty of the Executive Committee to follow the case through any and all courts until a correct judgment be obtained, if in the opinion of the Council such a course should be judicious. *In no case will the Association compromise.*

XI. The Executive Committee may amend or change the rules and regulations during the year, but subject to revision by the House of Delegates at the next annual meeting of the Kentucky State Medical Association.

### NEW STATE BOARD OF HEALTH.

[We have been unable to secure a copy of the Bill establishing a new State Board of Health as finally passed. The following was the original Bill No. 61, and we are informed that it passed after amendment making the salary of members \$1,500 instead of \$2,000, and making the Governor's appointments subject to confirmation by the Senate.—Editor.]

#### SENATE BILL NO. 61.

An Act to amend an act entitled "An Act to establish in this State boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March 31st, one thousand eight hundred and eighty-seven."

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

I. From and after the passage and approval of this act, section one of the act entitled "An act to establish in this State boards of health and a bureau of vital statistics, and to define their respective powers and duties," approved March

thirty-first, one thousand eight hundred and eighty-seven, shall be and the same is hereby amended as follows:

1. There shall be in this State a State board of health, to be known as the "Board of Health of the State of New Jersey," which shall be composed of six suitable persons, citizens and residents of this State, to be appointed by the Governor from time to time as hereinafter directed; one of whom shall be a physician of at least five years' practice in this State, who shall be the secretary of the said board, and shall also be superintendent of vital statistics. The Governor shall, at the time of appointment, indicate one member of said board who shall be the president thereof. of six years, and their respective terms of office shall be so arranged that the term of office of not more than one member shall expire in any one year. The president and medical secretary of said board shall, in each instance, upon the occasion of vacancy and reappointment, be designated by the Governor. If the office of any member shall for any cause become vacant before the expiration of the term for which such member was appointed, the same shall be filled by the Governor for the unexpired term only. The compensation of each of such members shall be two thousand dollars per year, payable monthly, except the secretary, whose compensation shall be two thousand five hundred dollars per year, payable monthly.

2. Section three of the said act shall be and the same is hereby amended to read as follows:

3. The president shall call meetings as often as once in three months and also whenever in his judgment it shall be necessary, and whenever requested so to do by two members of the board. The secretary of the board shall superintend the performance of the duties prescribed by law in relation to the State Board of Health, and the classification, index and transcription of vital facts hereinbefore required to be made. The said State Board of Health shall in the month of December in each year make a report to the Governor of their investigations and inquiries for the year, with such communications and suggestions concerning the public health as they may deem proper.

3. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall take effect immediately.

### STATE DEPARTMENT OF HEALTH.

[We give below the Bill drawn by Judge W. M. Lanning, of Trenton, for the establishment of a State Department of Health, and also the Bill which recently passed our Legislature creating the State Board of Health.—Editor.]

#### An Act to establish a State Department of Health and to define its powers and duties.

Be it enacted by the Senate and General Assembly of the State of New Jersey:

1. There shall be in this State a Department of Health, to be composed of a State commissioner of health, an advisory board and the chiefs and other employees in the several divisions and bureaus hereinafter provided for.

2. The commissioner of health shall be appointed by the Governor; his term of office shall be five years and he shall receive an annual salary of five thousand dollars and his expenses actually and necessarily incurred in the performance of his



official duties, to be paid monthly on the audit of the comptroller, and upon his appointment the terms of office of the members and the secretary of the State Board of Health shall expire and no appointments shall thereafter be made to those offices.

3. The advisory board shall be appointed by the Governor, and shall consist of five members; each member of said advisory board shall hold office for the term of five years, and their respective terms of office shall be so arranged that the term of office of not more than one member shall expire in any one year, *provided, however*, that the terms of office of the members first appointed shall be for one, two, three, four and five years; if the office of any member shall become vacant before the expiration of the term for which such member was appointed, the vacancy shall be filled by the Governor for the unexpired term only; no member of the advisory board shall, as such, receive any salary, but the actual traveling and other expenses of any member while engaged in the performance of the duties of the board shall be paid when approved by the comptroller; the advisory board shall choose a chairman, who shall call meetings of the board whenever in his judgment it may be necessary, and whenever requested so to do by the commissioner of health or by any two members of the board; the said board shall choose a clerk from among the employees of the department of health; they shall consider all questions affecting the public health which may be referred to them by the commissioner of health, and they shall make such general regulations for the enforcement of the health laws by the said commissioner as may, in their judgment, be necessary; they shall advise the commissioner on such matters as may come before them, and prepare such reasonable rules and orders as may be deemed necessary by said board for the prevention of disease and for the performance of the duties assigned by law to the State Department of Health, and the commissioner of health shall be governed by said rules and orders.

4. It shall be the duty of the commissioner of health to protect the health and life of the people of the State, and to determine and employ the most efficient and practical means for the restriction and prevention of the spread of disease; he shall obtain, collect and preserve such information relating to mortality, disease and health as may be useful in the discharge of his duties or may contribute to the promotion of health or the security of life in the State; he shall cause examinations, inquiries and investigations to be made concerning all conditions affecting life and health in any locality, and for that purpose the commissioner, and any person authorized by him to do so, may, without fee or hindrance, enter and examine all premises, grounds, buildings, apartments, vehicles and places within the State, and all persons so authorized by him shall have the power and authority conferred by law upon constables; the commissioner of health may, from time to time, employ competent persons to render sanitary service and to make or supervise practical and scientific investigations and examinations requiring expert skill, and prepare reports relative thereto, and he may purchase such supplies and materials as may be necessary in carrying on the work of his department; he may issue subpoenas to secure the attendance of witnesses and compel them to testify in any matter or proceeding before him or his authorized agent.

5. The commissioner of health may employ such clerical and other assistants as are necessary for the proper performance of the work of the Department of Health, and he may assign appropriate powers and duties to said employees, not inconsistent with the constitution or laws; he shall appoint in writing one of the employees in the department who shall possess the powers and perform the duties of commissioner of health during his absence or inability to act.

6. The following divisions or bureaus are hereby established in the Department of Health: Bureau of vital statistics; division of food and drugs; division of laboratory diagnosis; division of public water supplies and sewerage; division of sanitary inspection; division of infectious diseases of animals, and each of these divisions or bureaus shall be conducted under the supervision of the commissioner of health, by a director or bureau or division chief; the chiefs or directors of the several divisions or bureaus shall be appointed by the commissioner of health, subject to the approval of the advisory board, and the salaries of said chiefs or directors of the several divisions or bureaus and of all other appointees or employees of the Department of Health shall be fixed by the commissioner with the approval of the said board; the terms of office of the said chiefs or directors of divisions or bureaus shall continue until their successors are appointed; the commissioner of health shall have power at any time to remove from office any or either of the above mentioned chiefs of bureaus, or any other employee or appointee of the Department of Health, such removal to take effect when approved by the advisory board. All of the appointees of the commissioner of health, except the chiefs or directors of the several divisions or bureaus and persons temporarily employed for special service, shall, before appointment, be tested for fitness for the duties to be performed, and every applicant for such appointment shall be of good moral character and shall make application upon blank forms furnished by the commissioner, and said blanks shall show the name of the applicant, age, sex, residence and previous employment; all examinations shall be in writing as far as possible, and all examination papers and ratings shall be preserved for reference; the said examinations shall be conducted by capable persons selected by the commissioner of health.

7. The commissioner of health is hereby empowered to perform all of the duties imposed by law upon the State Board of Health or any member or officer thereof, and wherever the terms "State Board of Health" or "Board of Health of the State of New Jersey" appear or reference is made thereto in the law, it shall be deemed to refer to the Department of Health as created in this act, and the commissioner of health, in addition to the powers conferred by this act, shall have all the powers conferred, and perform all of the duties imposed by law upon the State Board of Health or any member or officer or appointee thereof, including the secretary.

8. This act shall not affect pending actions or proceedings, civil or criminal, brought by the State Board of Health, but such actions or proceedings may be prosecuted or defended in the same manner and to the same effect by the commissioner of health as if this act had not taken effect.

9. All salaries and expenses authorized in this act shall, after approval by the commissioner of health and after approval and audit by the comp-



troller, be paid by the State Treasurer, provided, that an appropriation therefor has first been made by the Legislature.

10. The commissioner of health shall furnish, in writing, such information and reports to the advisory board of health as the said board may, from time to time, request, and he shall make an annual report to the Governor setting forth sanitary conditions, progress and prospects throughout the State, and the doings of the Department of Health, its officers, agents and employees, during the preceding year, and other useful information, including reports from each of the chiefs or directors of the several divisions or bureaus of the Department of Health, and shall advise any further legislation deemed necessary for the better protection of life and health.

11. All sums now or hereafter appropriated by the Legislature for the use of the State Board of Health shall at the time this act takes effect become available for the uses of the State Department of Health.

12. This act shall take effect immediately.

## BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

### Monthly Statement of Vital Statistics— For April, 1908.

During the month ending April 15, 1908, 3,134 deaths were reported to the Bureau of Vital Statistics, showing a decrease of 519 deaths from the corresponding period last year, when 3,653 deaths occurred. The greatest decrease is shown in diseases of the respiratory system. The figures for the last two months, compared with the month of April, 1907, are as follows: Number of deaths from tuberculosis of the lungs—April, 1908, 278; April, 1907, 403. Pneumonia—April, 1908, 354; April, 1907, 277. Diseases of the respiratory system (pneumonia and tuberculosis excepted)—April, 1908, 235; April, 1907, 449.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending April 15, 1908, compared with the average for the previous twelve months (the latter are given in parenthesis): Typhoid fever, 37 (37); measles, 26 (13); scarlet fever, 46 (29); whooping cough, 17 (20); diphtheria, 48 (54); malarial fever, 2 (2); tuberculosis of lungs, 278 (310); tuberculosis of other organs, 54 (51); cancer, 128 (122);

cerebro spinal meningitis, 36 (32); diseases of nervous system, 428 (383); diseases of circulatory system, 382 (332); diseases of respiratory system (pneumonia and tuberculosis excepted), 235 (185); pneumonia, 354 (274); infantile diarrhoea, 70 (204); diseases of digestive system (infantile diarrhoea excepted), 181 (201); Bright's disease, 219 (215); suicide, 44 (32); smallpox, 1 (0); all other causes, 547 (609); totals, 3,134 (3,109).

**Food and Drugs.**—During the month ending April 30, 1908, 711 samples were examined in the State Laboratory of Hygiene, of which 53 of the 189 of milk, 4 of the 28 of butter, 3 of the 11 of coffee, 4 of the 8 of canned corn, 4 of the 21 of lard, 8 of the 21 of extract of lemon and 4 of the 32 of extract of vanilla were below the standard. Number of samples of water analyzed, 90.

**Bacteriological Examination for Diagnosis.**—From suspected cases of diphtheria, 245; tuberculosis, 355; typhoid fever, 146; malaria, 10; miscellaneous, 17; total, 773.

### RAILROAD FARES TO CAPE MAY.

*Dr. Daniel Strock, Chairman Arrangements Committee, 326 Cooper St., Camden, N. J.*

DEAR SIR:—Your application for reduced fares for the above occasion has been considered by the several interested lines and the following authorized, which is the greatest concession they feel they can grant therefor:

Two cents per mile in each direction *from points in New Jersey*, on card orders; tickets to be sold and good, going June 16 to 20, returning to June 27, inclusive.

The card order is a joint one, covering all lines. The orders will be furnished by this office and are to be distributed by you. They must be presented to ticket agents at starting points to secure tickets at the reduced fares and will be honored by the agents of any of the lines over which the reduction applies. A supply of 300 of the orders will be sent you within a short time for distribution amongst your members.

Very truly,

L. P. FARMER, *Commissioner.*

[The regular railroad fares to the seacoast resorts will be advanced about June 1st. It would be well for those who will attend the annual meeting at Cape May, to inquire of their ticket agents which is cheaper—this 2 cents per mile rate or the regular excursion rate to Cape May.—Editor.]

### MEETINGS OF THE COUNTY MEDICAL SOCIETIES

County	Secretary	Place of Meeting	Time
ATLANTIC	Milton S. Ireland, Atlantic City	Atlantic City	8.30 P. M. June 5 and 19, 1908
BERGEN	Charles W. Harveys, Ridgewood	Free Library Bldg, Hackensack	July 14, '08.
BURLINGTON	George T. Tracy, Beverly	Cole's Hotel, Moorestown	12.30 P. M. June 10, 1908.
CAMDEN	Daniel Strock, Camden	727 Federal street, Camden	11 A. M., October 13, 1908.
CAPE MAY	Nathan A. Cohen, Wildwood	Cape May Court House	11 A. M., October 6, 1908.
CUMBERLAND	A. J. Mander, Millville	Weatherby House, Millville	July 14, 1908.
ESSEX	Ralph H. Hunt, East Orange	Oraton Hall, Newark	7 P. M.
GLOUCESTER	George E. Reading, Woodbury	Cole's Hotel, Pitman	6 P. M., Sept. 17, 1908.
HUDSON	Arthur P. Hasking, Jersey City	Lincoln Hall, Jersey City	8.30 P. M.
HUNTERDON	O. H. Sproul, Flemington	Grand Jury Room, Flemington	10 A. M., October 27, 1908.
MERCER	Edgar L. West, Trenton	Society Rooms, Trenton	June 9, 1908.
MIDDLESEX	Benj. Gutmann, New Brunswick	Metuchen	2 P. M., July 15, 1908.
MONMOUTH	Harry W. Ingling, Freehold		June 9, 1908.
MORRIS	Henry W. Kice, Wharton	Savings Bank Bldg., Morristown	12 M. June 9, 1908.
OCEAN	Alex. M. Heron, Lakewood		
PASSAIC	Elias J. Marsh, Jr., Paterson	Passaic	8.30 P. M.
SALEM	Henry Chavanne, Salem	Schaefer House, Salem	2 P. M., May 6, 1908.
SOMERSET	C. R. P. Fisher, Bound Brook	Ten Eyck House, Somerville	
SUSSEX	Shepherd Voorhees, Newton	Newton	11 A. M.
UNION	P. Du Bois Bunting, Elizabeth	Elizabeth General Hospital	3.30 P. M., July 8, 1908.
WARREN	William J. Burd, Belvidere	Belvidere	

Secretaries will please notify the editor promptly of places and times of meetings, giving town, place, day and hour.

## New Membership Lists.

The revised membership lists of the county medical societies will be in print very soon and will be sent to the county secretaries and treasurers for correction. They should be critically examined and any errors, especially in the *orthography of names* or exactness of *post office addresses*, should be observed and corrected. It is desired that the first name be ascertained and printed in full. It sometimes happens that these lists, hastily prepared and carelessly revised, contain misspelled names and incorrect street or town addresses. In such instances the errors may remain uncorrected unless the members personally complain of their misspelled names or of their failure to receive their JOURNALS. The names and addresses of any delinquents who have paid their assessments *since* the reports were made should be added to the lists and the assessments with the corrected lists be returned at once to the Secretary of the Medical Society of New Jersey.

## Books Received.

NEW AND NON-OFFICIAL REMEDIES. Third edition. March 14, 1908. American Med. Assn.

This little book, containing the articles tentatively approved by the Council on Pharmacy and Chemistry, consists of a report on the various different articles examined by the Council and merits a careful perusal by every physician.

## PROPRIETARY PREPARATIONS APPROVED BY THE A. M. A. COUNCIL ON PHARMACY AND CHEMISTRY.

(Continued.)

### SODIUM ICHTHYOL.

A derivative of ichthyol containing sodium instead of ammonium.

Actions, Uses and Dosage.—These are the same as those of ichthyol. Its firmer consistence makes it more suitable for pills. Manufactured by the Ichthyol Co., Hamburg. (Merck & Co., New York.)

### STOVAINE.

Stovaine,  $\text{CH}_3\text{C}(\text{C}_2\text{H}_5)(\text{O.CO.C}_6\text{H}_5)\text{CH}_2\text{N}(\text{CH}_3)_2\text{Cl} = \text{C}_{14}\text{H}_{22}\text{O}_2\text{NCl}$  is the hydrochloride of 1-dimethylamino-2-ethyl-2-propanol benzoyl ester.

Actions and Uses.—Stovaine acts as a local anesthetic of about the same power as cocaine, but dilates the blood vessels, whereas cocaine contracts them and exerts a tonic action on the heart. It is only  $\frac{1}{3}$  to  $\frac{1}{2}$  as toxic as cocaine. It is used as a local anesthetic; while most reports are favorable, one case of gangrene has been reported following the use of a 10 per cent. solution. Dosage.—Internally, 0.002 Gm. (1/30 grain) as pill. Locally it may be used in the eye in 4 per cent. solution and applied to other mucous membranes, as in laryngology, in from 5 to 10 per cent. solution. For hypodermic injections for local anesthesia it can be used in 0.75 to 1 per cent. solution. Manufactured by the Poulenc Frères Company, Paris. (Walter F. Skyes, New York.)

### STYPTICIN.

Stypticin,  $\text{C}_{12}\text{H}_{13}\text{O}_3\text{N.HCl}$ , is the hydrochloride of cotarnine an oxidation product of narcotine, similar to hydrastinine.

Actions and Uses.—Stypticin is a hemostatic, analgesic and uterine sedative. The mechanism of its action is obscure. It has been recommended particularly in functional dysmenorrhea and menorrhagia of puberty and of the climacteric; in subinvolution of the uterus after parturition and abortion, as well as in all profuse uterine hemorrhages; in bleeding from the bladder, from the nose, after extraction of teeth, etc. Dosage.—Internally, 0.05 Gm. ( $\frac{3}{4}$  grain) four to five times daily, in sugar-coated tablets or gelatin capsules; or by hypodermic injection (in urgent cases) 2 Cc. of a 10 per cent. solution; externally, as a styptic, pure or in strong solution. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York.)

### STYPTOL.

Styptol,  $(\text{C}_{12}\text{H}_{13}\text{O}_3\text{N})_2\text{C}_6\text{H}_4(\text{COOH})_2$ , is the normal phthalate of cotarnine, an oxidation product of narcotine, similar to hydrastinine.

Actions and uses.—Its action resembles that of stypticin. Compounds with phthalic acid are said to have especial hemostatic properties. Styptol has been recommended in uterine hemorrhages. Dosage.—0.065 Gm. (1 grain) in sugar-coated tablets, 3 to 5 times daily. Manufactured by Knoll & Co., Ludwigshafen a. Rh. and New York.

### STYRACOL.

Styracol,  $\text{C}_6\text{H}_5\text{CH:CH.COOC}_6\text{H}_4\text{OCH}_3 = \text{C}_{14}\text{H}_{14}\text{O}_3$ , is the cinnamic acid ester of guaiacol.

Actions and Uses.—Styracol is an intestinal antiseptic and is claimed to combine the anti-tuberculosis actions of guaiacol and cinnamic acid. It is said to liberate in the intestinal canal a larger proportion of its guaiacol (up to 85 per cent.) than other synthetic preparations of that substance. It is recommended for the initial stage of phthisis, chronic enteritis and intestinal disturbances in general, catarrh of the bladder, etc. Dosage.—1 Gm. (15 grains) in powder or tablets. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

### SUBLAMINE.

Sublamine,  $3\text{HgSO}_4.8\text{C}_2\text{H}_4(\text{NH}_2)_2$ , is a compound of three molecules of mercuric sulphate with eight molecules of ethylenediamine (which see).

Actions and Uses.—Sublamine is a disinfectant, similar to mercuric chloride, over which it has the advantage of being non-irritating, more penetrating and readily soluble. Dosage.—It is used in 1:1,000 solution for skin disinfection and in 1:5,000 to 1:10,000 solutions for irrigations of the bladder, etc. It may be used in syphilis by injection into the gluteal muscles of a 3 or 4 per cent. solution. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

### SULPHONAL.

A name applied to Sulphonmethanum, U. S. P. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

### SUPRARENAL ALKALOID.

The active alkaloid of the suprarenal (epirenel or adrenal) glands.

Actions and Uses.—Suprarenal alkaloid acts peripherally on a variety of structures, probably



by stimulating the sympathetic nerve endings. Its most important therapeutic actions consist in a constriction of the blood vessels, with consequent high rise of blood pressure; a stimulation of the vagus center with slowing of the heart, and a direct stimulant to digitalis. Large doses also cause glycosuria; continued administration of large doses leads to atheroma. The effect of a single dose is very fleeting. It is not irritant. The effects are seen on local application and intravenous and intramuscular injection. When given to animals, by mouth or hypodermically, moderate doses have almost no action. Dilute water solutions rapidly lose their strength, the deterioration being accompanied by a reddish or brownish discoloration. The alkaloid is used mainly locally for its vasoconstrictor action, in hemorrhage, and in catarrhal and congestive conditions (by hypodermic injections). Intravenous injections are effective in shock and anesthesia accidents (care being taken not to give an overdose). It has also been recommended in heart disease, Addison's disease, etc., but opinions are divided as to the benefits to be expected from oral administration.

#### SUPRARENAL LIQUID.

Suprarenal liquid is an aqueous extract of suprarenal glands, preserved with 0.8 per cent. of chlorbutanol (chloretone). Each Cc. (16 minims) of the solution represents 1 Gm. (15.4 grains) of the fresh glands.

**Actions and Uses.**—See Suprarenal Alkaloid. **Dosage.**—The preparation is used undiluted for spraying, especially for mucous membranes. Prepared by Parke, Davis & Co., Detroit, Mich.

#### SUPRARENAL OINTMENT.

An ointment containing 0.1 per cent. of suprarenalin, dissolved in a petrolatum base.

**Actions and Uses.**—It is recommended for application to mucous membranes, as the eye or the nose. The action is said to be slower but more lasting than that of the solution. Prepared by Armour & Co., Chicago.

#### SUPRARENAL SOLUTION.

A 1-1,000 solution of suprarenalin sulphite in normal saline solution, free from other preservatives. **Dosage.**—See Suprarenalin. Manufactured by Armour & Co., Chicago.

#### SUPRARENALIN TRITURATES.

Triturates composed of suprarenalin, milk sugar and boric acid, in such proportion that each 0.03 Gm. ( $\frac{1}{2}$  grain) triturate dissolved in 15 minims of water, yields a 1-1,000 solution.

**Actions, Usage and Dosage.**—See Suprarenalin. Prepared by Armour & Co., Chicago.

#### TANNIGEN.

Tannigen,  $C_{14}H_8(C_2H_3O)_2O_3 = C_{18}H_{14}O_5$ , is the acetic acid ester of tannin.

**Actions and Uses.**—Tannigen passes unchanged into the intestine, where it becomes effective as an astringent in contact with the alkaline juice. It is said to be free from irritant action. It is recommended in acute diarrheal affections, such as acute intestinal catarrhs, cholera morbus, cholera infantum and dysentery; it has also been used with reported success for the diarrhea of typhoid fever and intestinal tuberculosis. **Dosage.**—0.2 to 0.7 Gm. (3 to 10 grains) four times per day,

dry on the tongue followed by a swallow of water; or mixed with food, avoiding warm or alkaline liquids. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

#### TANNALBIN.

Tannalbin is a compound of tannic acid and albumin thoroughly exsiccated.

**Actions and Uses.**—Tannalbin is astringent. Being insoluble in the gastric juice, it becomes effective when it reaches the intestines, where it slowly splits off tannic acid. It does not produce gastric disturbance. It is recommended in diarrhea, especially in that of children, and in phthisis. **Dosage.**—1 to 4 Gm. (50 to 60 grains) in powder (or tablets) followed by water; infant doses, 0.3 to 0.5 Gm. (5 to 8 grains) in gruel or other mucilaginous liquid. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

#### TANNOFORM.

Tannoform,  $CH_2(C_6H_5)_2 = C_{20}H_{20}O_{18}$ , is a condensation product of formaldehyde with gallo-tannic acid.

**Actions and Uses.**—Tannoform is astringent and antiseptic. It is recommended on account of these properties in chronic intestinal catarrh and externally in hyperidrosis, bromidrosis, weeping eczema, ozena, etc. **Dosage.**—0.25 to 0.5 Gm. (4 to 8 grains); externally, pure or in 25 to 50 per cent. triturations (with talc) as dusting powder, or as 10 per cent. ointment or soap. Manufactured by E. Merck, Darmstadt (Merck & Co., New York).

#### TANNOPIN.

Tannopin,  $(C_{14}H_{10}O_9)_3 \cdot (CH_2)_6N_4 = C_{48}H_{42}O_{27}N_4$ , is a condensation product of tannin with hexamethylenamine.

**Actions and Uses.**—Tannopin is an intestinal astringent and antiseptic; it passes unchanged through the stomach, but, being gradually decomposed by alkalis, it becomes effective in the intestinal tract, exerting the action of its two components. **Dosage.**—0.3 to 0.5 Gm. (5 to 8 grains) for infants and children; 1 Gm. (15 grains) for adults, dry on the tongue, followed by a swallow of water, or sprinkled on food, four times a day. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

#### THEOBROMINE.

Theobromine, 
$$\begin{array}{c} N(CH_3) \cdot CH : C \cdot N(CH_3) \backslash \\ | \quad | \quad | \quad | \\ CO \text{---} NH.C = N, \quad CO= \end{array}$$
  $C_7H_8O_2N_4$ , is a base occurring in *Theobroma cacao*, *Kola acuminata*, etc., and also made synthetically.

**Actions and Uses.**—Its uses are similar to caffeine, but it has relatively greater diuretic, cardiac and muscular activity. It does not act so powerfully on the central nervous system. It is recommended as a diuretic. The great obstacle to its use has been its insolubility and the consequent uncertainty of the degree of its absorption. It is liable to produce gastric disturbances. **Dosage.**—0.35 to 0.5 Gm. (5 to 8 grains).

Free ammonia in the urine of a diabetic is a bad prognostic sign and its presence is a contra-indication to operation in diabetic gangrene, for it shows the presence of beta-oxybutyric acid in the blood.—*Amer. Jour. Surgery.*

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## PRESIDENT'S ADDRESS.\*

### Medical Expert Testimony.

By Edward J. Ill, M. D., Newark, N. J.

Will you permit me to express my deep appreciation of your kindness in electing me to the exalted position of President of this, the oldest state medical society in the country. You have made me a permanent debtor and I trust that I may remain of value to this society, in its ranks as an humble servant, so long as my physical and mental condition lasts.

Your President begs to extend his thanks to all those who so willingly and so nobly assisted him in presenting the all-important question of vivisection to the committee of the House of Assembly, and especially to the many medical men who came to give weight simply by their presence. The result was a most remarkable victory, and shows what we can do by a united effort.

There is no doubt that well directed efforts failed to secure a representation of this society on the State Board of Health, and that we considered it a slight. We can only regret that the Governor saw fit to appoint but one medical man on the Board.

It has been customary for the President to make such suggestions as in his opinion would enhance the welfare of the profession generally and this society in particular.

During the past winter it has been your President's pleasure and pleasant duty to use his efforts in behalf of the profession

before the legislative body. It soon became apparent that we were working at a great disadvantage because of the want of proper legal counsel.

While our legislative committee does excellent work, that work would be much enhanced if it was directed by competent legal authority. I would, therefore, suggest that the society engage such counsel, and that we should not forget that the best is none too good. Such a counsellor might well direct what we can do to properly protect ourselves against suits for damages. If you think wise he might be engaged to defend us in such charges whenever the trustees direct such procedure, the cost being assessed on each individual member, a most economical and safe insurance.

Only within a few years one of our members, Dr. Wickman, of Newark, N. J., was obliged to defend himself at a cost amounting to nearly twelve hundred dollars, which he could ill afford. Such an expense should have been borne by all of us, for the defendant not only protected himself but every member of the State society. His courage and effort deserve the highest commendation. Once such trial turns against an honest practitioner, every one of us stands in imminent peril of blackmail. The total expense to this society would be trivial when compared with its benefits. While writing these lines two medical friends, for whose attainments we all have the highest respect, are threatened by a suit for error in diagnosis. They should have the assistance and moral support of the great and influential body of men who constitute this society.

The work of last year's Committee on Medical Defence should receive our most careful consideration. The well-to-do practitioner who can afford to pay high prices

\*Delivered at the 142d Annual Meeting of the Medical Society of New Jersey, Cape May, June 18, 1908.



to commercial institutions is not the one we should desire to reach and protect, but those whose income is small and to whom such a suit means disaster.

Your special attention might be directed to the condition of quack and criminal advertisements, and all they go for, which infest our lay journals and which it should be our aim to eradicate.

Such counsel as your President suggests would be of incalculable value in these efforts.

Your President wishes to draw your especial attention to the prevalence of the morphine and cocaine habit. Not infrequently a physician is to blame. Morphine or cocaine should never be prescribed, but handed out to the patient in such doses as his present needs require. Exceptions to this are in cases of the incurable and painful malignant diseases. Unquestionably a morphine or cocaine habitue might recover damages for such maladministration.

Since you did me the honor to elect me your third Vice-President I have considered the subject, which shall be the main theme of this address, and which during the past year has been widely discussed in both professional and lay circles. I refer to the question of

#### MEDICAL EXPERT TESTIMONY.

Let us first clearly understand the difference between the expert witness and the ordinary witness, that we may do no injustice to any one. The ordinary witness states a fact; the expert expresses an opinion. It should, therefore, be called opinion testimony. This would take away much of the apparent greatness of the "*expert*." The expert may be replaced by any other expert, he being able to accomplish the same task, and to assist in securing the ends of justice.

A witness who is convicted of not having spoken the truth is punished by the law. The expert cannot be prosecuted for having expressed an opinion, though it may be a falsehood, and is commonly contradictory to that of another expert.

My innermost feeling revolts when I am asked to give expert testimony. Nor have I consented except when a fellow practitioner was wrongly brought before the bar in damage suits. I felt that I was asked, not for the purpose of eliciting the truth, but to formulate such an opinion as would have an influence on the judge and jury. If distortion of the truth was necessary I was not to flinch.

The public as a whole knows little of the work, the high aim and the meaning of eti-

quette in the medical profession. They do not know that our whole efforts are in behalf of suffering mankind and the prevention of disease; that our personal comfort and interest are commonly secondary to this attainment, and that egotism is usually found less in our profession than in any other.

They are little able to judge of us as to our attainments and our knowledge. They are more careful in the selection of the caretaker of their souls, and their worldly possessions than they are of him who looks after their physical wellbeing. The only judge of the attainments of a physician is a physician. The people do know, however, that, as a whole, we are honest men; otherwise they would hesitate to trust their lives into our hands, a trust which is the surprise of many of us, knowing our shortcomings.

But they also know that the testimony of the medical expert before a court of law is a *purchasable article, bought and sold for dollars and cents*. The court and the jury know this likewise, and the fact is bewildering to the people. They further know that such bought experts are anxious that their side shall win, whether the defendant is innocent or not, for their reputations as experts are at stake. The people hold us as objects of derision and ridicule, for all must suffer for the sins of the few. They know that in the eyes of an intelligent court and jury our opinion carries not the slightest weight. They also know that the defendant can receive the services of as many doctors as his bank account will permit, provided the opposition has not already secured their services. Our opinion is the plaything of counsel on either side.

He is the most sought for expert who has the gift of speech and ready wit to impress the jury, not the one of greatest knowledge, or of honest intentions. Those of us who go to court as honest men, and I know many of them, in an honest case, are discredited because of what has become a pernicious system.

What others think of us as experts is apparent when we read such criticism as was given by the celebrated Clark Bell, LL. D.:

"The salvation of the system of expert evidence, especially as relating to the criminal cases where human life is in the balance, is at stake, and only legislative action can prevent its elimination from our criminal procedure. It is only by arousing public opinion to the exigencies of the situation that we can expect or even hope for any deliverance. The degradation to which it has sunk, especially in the Thaw trial, is

one of the deplorable phases of the subject. It is well to look the question fairly in the face. The medical expert when he appears as the paid witness for either the State or the accused, is *discredited\** by all, *believed\** in by none. It is a blistering shame to the medical profession now that no important case of homicidal insanity is tried where the four or six witnesses on the one side are not met and balanced by a like number on the other. Judges do not at all consider the medical witness as an important factor, and juries do not pretend to regard the testimony, or pay any heed to it, and they do not hesitate to so state publicly, from their seats as jurymen. As the law now stands, and as the evidence comes to the jury it is of no value whatever and the juries are perfectly justified in their refusal to even consider it. In the mind of the great public it is fast becoming to be universally accepted as a fact that the paid medical expert swears for the side that *engages\** and *compensates\** him. It is incredible that the medical profession has fallen into such a horrible abyss as all this implies."

He very charitably says that:

"The fault is in the system itself and not in the profession of medicine. The law should be amended as to make such scandalous conflicts of opinion impossible, upon what the public and the juries consider as an identical question. All counsel know that the medical men are not as a rule willing to swear to an opinion they do not entertain."

Prominent jurists all over the country are anxious for a reform in this matter. Especially is the court anxious for such a change as will give an independent and true opinion of the case at hand. Thus we have heard the wise words of our own Judge Charles G. Garrison, of the Supreme Court. Judge Garrison spoke to us of the "intolerable conditions that attend exhibitions of professional expertism," and asks us to correct our ethical code. He furthermore said: "I make this appeal because I believe that in no other way can existing evils be practically met."

In an address delivered by Judge Cowing before the New York Academy of Medicine, he sums up his argument by suggesting changes along the following lines:

"First, Paid experts are now partisan. The jury sees them coaching the counsel, who is responsible for their payment, as to questions to ask opposing experts, and the

jury concludes that the testimony is not valuable. Second, the quality of the expert is not sufficiently looked into and insisted upon now. Lawyers and some judges think that the greater the number of experts on their side, the stronger ought their case to be. Third, it is too often the custom now to drag in too many experts on both sides. The jury is confused. Fourth, it is not fair to allow medical experts to give opinions based upon purely hypothetical questions. They should give opinions on facts within their knowledge, for ingenious lawyers can fix up hour-long hypothetical questions which would confuse an expert, much more the jury."

Judge Cowing said that while he was a practicing lawyer, and in his twenty-eight years on the General Sessions bench he had often thought how absurd was the method of getting and using the so-called expert testimony.

In the *Medical Fortnightly*, Judge Daniel G. Taylor, of St. Louis, Mo., gives us this suggestion, after a long reasoning why expert testimony and the hypothetical question must be permissible:

"A closer approach to an effective remedy along these lines might be to have these expert triers of the particular fact after a full examination of witnesses submitted by both sides, report to the jury through a representative their conclusions and then under a rule of evidence provide that no other opinion testimony should be permitted. In this way the jurors would only receive the conclusion of the commission, and the conflicting opinion testimony would be eliminated; the jurors would be left to ultimately decide all questions of fact, and the party litigant would have had the benefit of producing his witnesses and of cross-examining his opponent's witnesses. This latter plan I offer simply as a suggestion to be considered and discussed by those who are trying to lead us out of our difficulties."

This suggestion does not help our profession out. It still gives a chance to buy expert opinion in the market.

The courts can give us no relief because the laws are inadequate. Judge Garrison, speaking of the odium it casts upon us, distinctly said, "It is you that chiefly suffer from the professional exhibition of which I speak." Neither does he make it easy for our conscience when he says, "The evils arise when the giving of testimony has become a business, conducted on the so-called business principle." He tells us that many

\*Italics are mine.



experts go on the stand with a contract for a contingent fee.

Will you tolerate such a stigma any longer? Will you permit this same man who thus sells his opinion to remain a member in good standing in your local society, in your county society, on the staff of your hospital, and to meet you as an equal at the bedside? We care little how the law and the court, the defendant and the prosecution fare until this blistering shame is removed from the honest members of the profession. We have nothing to do with the lawyer who sells his work on the contingent system. There are differences in the points of ethics in different professions. Let the bar look after that.

Judge Garrison truly says:

"If you will prohibit physicians from assuming the rôle of witnesses, in cases where they are made advocates in fact, by the effect their testimony has upon the compensation they are to receive, you will have done more for the good name of your calling than the law has ever done for you or for itself."

I believe that you will agree that any of us may take a retainer as a medical advocate and do our honor no harm, for we will assist in bringing out the truth. But to go on the witness stand, either as a medical expert, pure and simple, or for a contingent fee, is a matter so different that it must be treated entirely by itself.

The insult which members of the profession who give expert opinion are liable to is very apparent when we read the questions and answers that were brought out in the noted Mrs. Bradley trial, between Dr. Edward Brush and Judge O. W. Powers. Not only that, but the lamentable rôle that the expert plays when he acts as a prosecutor, a position which is far from being ideal to a disciple of Esculapius.

Judge O. W. Powers, of Salt Lake, chief counsel for the defendant, was very severe on Dr. Brush. The following dialogue took place:

"You were paid to come here and testify for the government?"

"I expect to be compensated," was the alienist's blushing admission.

"You came here for a compensation to aid the government in its efforts to convict the defendant?"

"Not exactly," was the reply.

"And you did aid the government," persisted Judge Powers. "You and Dr. Jelliffe have been sitting directly behind the district attorney and his assistants and sug-

gesting questions to be propounded to witnesses, both expert and lay?"

"I did suggest questions," was the reply.

"And you and Dr. Jelliffe were laughing and joking while the defendant was on the stand, during the most pathetic parts of her story?"

"I laughed at some of the evidence and was affected also by some of the pathetic features," he replied.

Then, again, the insult the prosecution offered to the alienist for the defense when he addressed the jury: "Didn't he appear like a gentleman who was making a speech and was mighty well pleased with himself and the sound of his voice?" asked Mr. Turner. Would the court tolerate such an insult to a commission appointed by itself?

The *New York Law Journal* of March 13th, 1908, has an extensive editorial opposing any change of the law. It says: "We have frequently emphasized the fact that the expert witness is no more infallible with an official appointment than without one, and therefore steadfastly opposed the project for the appointment of official experts whose testimony alone could be offered upon trials. Our views on the subject are shared by our contemporary, *Law Notes*, and we are glad to be able to copy the following forcible utterance on the subject from the edition of that periodical for March, 1908:

"*Physicians as Witnesses.*—Boston physicians have become sensitive as to the esteem in which medical expert witnesses are regarded by the public. They say that conditions have come to such a pass that a respectable physician might well hesitate to appear on the witness stand, as he could hardly fail to be conscious that he was looked upon as mercenary; that his opinion would be considered as having been bought and paid for by the party who summoned him, and neither court, jury, parties, nor the public in general would give him the credit of being honest, sincere or unbiased. They therefore propose to remedy the matter by asking the Legislature to authorize the courts to appoint official experts who shall be delivered from temptation by having their compensation fixed by the court and paid by the county. This is all very well and good for the medical profession, at least from the point of view of those of its members who think that the reputation of the profession generally will be safeguarded thereby, but it does not take into consideration the rights of the individual whose life, liberty or property may depend on some fact

which can be ascertained only by the aid of the testimony of medical experts. It is perfectly true that the most of the important cases in which such testimony has been given there have been two sets of physicians, each testifying squarely in contradiction of the other, but this is not astonishing when the nature of the testimony is considered. In a matter of insanity, for instance, the physician does not testify to any fact; he merely says that in his opinion a certain person is sane or insane, as the case may be. It is pure opinion evidence as a matter concerning which opinions naturally differ. Indeed, it would be remarkable if there were not a difference of opinion. A party interested in such an inquiry should have the right to call any competent and credible witness whose views are in his favor, with the same right in the opposite party, so that the jury may exercise their proper function of deciding the fact involved. It is questionable, to say the least, whether the plan proposed would not infringe on one of the most important of the rights of persons accused of crime, *viz.*, the right of impartial trial and of having compulsory process for the attendance of witnesses. If opinion evidence is to be received at all, it would be manifestly unjust for the law to say that the court should receive the opinion of particular individuals only, and that all others should be excluded, however eminent they might be in their special department of science. Opinion evidence is necessarily less satisfactory than the testimony of a witness who testifies as to facts, and conflict of opinion is generally unavoidable, but it would be an amazing thing to undertake to eliminate the conflict by the appointment of official experts and the exclusion of the testimony of equally or better qualified persons who might hold different views."

You will understand from this article alone that the lawyer pleading criminal and civil suit cases does not want the law changed. Many lawyers will oppose a change of the laws, hoping that circumstances will gradually produce a remedy, thus Judge Charles B. Wheeler, at a banquet of a branch of the Medical Society of the State of New York, said that he has little sympathy with the suggestion that the courts appoint special boards for the purpose of producing expert medical testimony. He furthermore says, and no doubt is in earnest in his appeal:

"I believe that the medical, clerical and legal professions are constantly raising their standards. My appeal is against commer-

cialism in the professions. Thousands of doctors are doing a great deal of work for the benefit of their community, as are lawyers and clergymen. The protest I make is against the man who does his work only for money; who, in giving expert testimony or other, goes before the jury for pay, with only selfish motives, to help out a bad cause. I am certain that in time the various professions will remedy the evils that now exist, and that the final appeal for that which is right may safely be made to your conscience and good sense."

What the laymen think of us I have already spoken of; what they write of us becomes apparent by the following from the *True Independent Sussex Press*, May 17, 1907:

"The expert witness is now regarded as a mere hireling. This is on the theory advanced by Harriman that you can get anything you want if you have the money to pay for it."

The *Hoboken Observer*, November 30, 1907, says:

"In the trial of Mrs. Annie Bradley for the murder of Senator Brown, expert alienists have shown how much doctors may differ in the diagnosis of any given case. This state of affairs has become so common in murder trials of late that, to those uninitiated in the ways of medicine and psychopathy, it seems almost a risk to put either themselves or friends in the hands of even reputable physicians, when there are ailments to consider."

A prominent lawyer in this State, who is constantly employing expert testimony said that he could go into any lawyer's office in Newark, gather up papers laying about and make out a case against him on expert testimony.

The following was found in a stray journal:

"Do you invariably pay five cents for your street car fare or L ticket? Do you make a practice of putting on your shirt before you put on your vest? When you look out of a window in your office do you always see the same building across the street? Have you ever thought about what you would do if you had a million dollars? Do you puzzle yourself over the way Chinese laundrymen keep track of the things they are supposed to wash? Do you make faces at yourself when you shave? Do you? Then you have dinosauri in your dome. Your think-tank needs soldering. Without any trouble at all you can get an alienist to make affidavit to it for \$25. 'Is there no hope?'



asked the Cigar Store Man. 'Oh! yes,' replied the Man Higher Up, 'you can get another alienist to veto the first one for \$50.'"

Do we have to tolerate this sort of thing?

In the medical profession itself there is great fermentation. An able article appeared in the *California State Journal of Medicine*, by Dr. A. E. Osborne.

During the address delivered by Judge Cowing at the New York Academy of Medicine, Dr. J. A. Wyeth, one of our honorable members, offered a bill which he thought would be acceptable, with slight changes, to the Bar Association, and which was the outcome of a conference between the Bar Association and the Medical Society of the State of New York.

Dr. John A. Wyeth's bill:

Section 1. At any time in the pendency of any civil proceeding in any court in which any medical or surgical question is likely to be material, the court or any justice may, or at the request of either party shall, appoint from the list made up as hereinafter provided one or more persons learned in the science of medicine and surgery, and not less than seven years' actual practice, as official experts, who shall investigate the facts of the case and give their opinion upon any such question arising in such proceeding, and make written report thereof to the court.

Section 2. Upon such appointment by the court, or if the parties file an agreement designating an expert for the case, the court shall issue an order for the person so appointed or agreed upon, to be served in the manner provided by the law for the service of subpoenas. As soon as may be after service thereof the expert shall make such examination of the case as in his judgment may be necessary and practicable, and shall file his report as above provided.

Section 3. Such report shall be filed in the case, and shall thereupon be open to the inspection of either party, and such report may be read in evidence, and such expert may be called as a witness by either party at the trial.

Section 4. The New York Academy of Medicine, for New York City, and the Medical Society of the State of New York, acting for the State outside of New York City, shall, through committees appointed by these organizations, furnish to the court or courts in various counties, a list of names of members of the medical profession of good standing and of not less than seven years' actual practice recommended by them as competent and expert in medicine and sur-

gery, from which list the court may select such expert or experts as in its judgment may be required. Such official expert shall be paid out of the treasury of the county a minimum fee of \$50 for the examination of, and report on, any case in question; \$50 additional for the first day's attendance in court upon the case, and \$100 a day thereafter while attendance is required by the court. The expert witnesses so listed may be called by any court of the State, and if called from the county of their residence the fee shall be increased to the extent of the extra expense incurred, to which shall be added a reasonable compensation for such extraordinary service and loss of time.

Section 5. Either party at the trial may call other expert witnesses than those appointed or agreed upon, but at his own expense.

An able article appears in *American Medicine* of Philadelphia, as an editorial of the October number, 1907, in which it advises the selection of a commission by the court. In closing, it says: "The matter must be taken up at once for the scandal is making a mockery of skill and learning."

In the same number the editor says:

"Lawyers have cynically remarked that they can buy any kind of an expert opinion they want, and they doubtless reflect a widespread popular idea that if the fee is big enough it moulds the opinion of the expert. This impression is a gross injustice to the great body of honorable men who have always formed their opinions from the facts. Nevertheless the cases in which the popular impression appears to be well-founded are so numerous that they taint all the rest. If the expert witnesses of two sides had sense enough to get together and discuss a case they would not differ so often. The profession owes it to itself to end the wretched system, which has really died already, in that it has outlived its usefulness. The decaying carcass smells to heaven. Disinfection is not enough. Burial is needed."

#### FOREIGN COUNTRIES.

Is there anything to learn from foreign countries and their usages?

*Switzerland*.\*—The law in regard to the practice of the medical profession, in the Canton of Bern, distinguishes by the ruling of March 14th, 1865, between physician, druggist or apothecaries, dentists and midwives. The various categories of medical

\*Switzerland. Emmert, Lehrbuch der gerichtlichen Medizin mit Berücksichtigung der deutschen, Oesterreichischen und Bernischen Gesetzgebungen.

experts may be employed exclusively as functionaries in the scope of their degrees or diplomas. For the individual medico-legal examinations, the requisite medical experts are nominated by the examining judge. In the Canton of Bern, the judge has entire freedom of choice between the registered medical persons (free system); whereas in certain other Swiss cantons (Vaud) he is limited to definite medical functionaries (restricted system, likewise obtaining in Germany and Austria.) The *number* of experts to be summoned for medico-legal investigations is determined by the examining judge, with the reservation that two experts are summoned for the more important cases and only one expert for the less important ones. Article 9 of the "Berner Strafprozess" rules that two experts should be summoned in a general way, one expert sufficing in misdemeanors and infractions of police regulations.

The great majority of examinations on the part of medical experts, in criminal cases, take place in the course of the preliminary examinations, which is not public; hence the persons concerned in these preliminary transactions are held to preserve secrecy in this connection. Article 93 of the Berner Strafprozess rules that all persons assisting in these closed transactions must maintain their secrecy inviolate.

*Italy.\**—The Medical Faculty of Rome—in view of the distressing spectacle furnished by the rendering of expert medical testimony, on the part of the prosecution and the defense, in recent criminal proceedings—for the furtherance of Science and Justice, unanimously voted at a meeting on June 20th, 1905, for the institution of a radical reform of expert medico-legal testimony, by the establishment of a single expert committee, for both the prosecution and the defense, with suppression of the expert debates in public proceedings, in the interest of the dignity of Science and the sanctity of Justice. The entire faculty of the kingdom is invited to take similar action.

The Liguro-Piemontese Section of the Societa Freniatria Italiana meeting of June 29th, 1905, approved the following order of the day: The Liguro-Piemontese Section of the Societa Freniatria Italiana, following the initiative of the Medical Faculty of Rome, votes that in every process in which expert medico-legal evidence may be re-

quired these testimonies should be audited by a single expert committee, and that in those cases in which the expert committee fails to agree, on account of marked differences of opinion between its members, an arbitrator should be nominated, and selected by a competent body, such as for instance the Academy of Medicine, or the Freniatrial Society.

Notwithstanding the opinions repeatedly expressed in the past, it appears that in the amendment to the criminal code the suggestion of the single expert committee has not as yet been accepted and sanctioned. Meanwhile it is a good sign that these opinions are being more and more urgently expressed, especially since in the Ministerio di Gracia e Giustizia there already exists a special bill, submitted a few years ago, for the rational and critical regulation of the medical expert system. Moreover, it appears that at present a bill is under preparation for the reform of a criminal proceeding, in which the system of the expert evidence is likewise to be amended. The solution of the problem will be further assisted by the establishment of medical judicial experts, which was recently insisted upon by the voting of the Superio Consiglio di Sanita. This will be facilitated by the institution of "finishing" courses for the various specialties, as sanctioned by the new University schedules, and will be supported by the Ministro dell' Istruzione, the Hon. Bianchi, who has repeatedly pointed out this necessity in the interests of Science and of Justice.

*France.\**—In his relations with the law the physician may appear (1) as an expert, (2) as a witness. The summons may be verbal, but are usually in writing. They must contain the title of the magistrate who is the sender; the name, profession, the character of the transactions; the dwelling of the addressee; the place whither he is to proceed, and the date. All these items may be needed for the control of the expenses at the time of settlement. For the same purpose the judge (*juge d'instruction*) must note at the foot of the summons the actions performed by the expert, and the time consumed in this performance. When the expert accepts the appointment he first renders an oath before the judge to make his report and give his opinion honorably and conscientiously. The discharge of this formality is put down in writing in the proceedings. In default of which the report loses its character and has only the value of a simple testimony. Extreme importance is attached

\*Revista Sperimentale di Freniatria e di Medicina Legale, Vol. 31.

1905. Voting of the Medical Faculty of Rome, meeting of June 20th, 1905.

\*A. Lacaseagne, Précis de Médecine Légale. Paris, 1906. The physician before the law.



by the law to this condition. After the oath has once been rendered it is no longer necessary to repeat it, if the expert has to make further visits or reports in the same case; but these reports must mention the oath previously rendered. In certain special cases, where a consultation of experts is required, or an opinion is needed on a common report, the judge may determine the points to be specified and the questions which require a solution.

While the doctor of medicine may be called upon as an expert—theoretically speaking—the summons will presumably be addressed as a rule to practising physicians only. Every general practitioner is bound to obey the summons he may receive from the courts. He must present himself, but before proceeding to an examination or an autopsy, he has the right and the duty, if he feels himself incompetent, to inform the magistrate to that effect, and to declare that he does not possess the knowledge required for the task with which the law means to entrust him. The physician must show his willingness, and when able to do so, he will lend his assistance. But if the case is difficult and the physician does not feel himself equal to the task to be conferred upon him, he should not hesitate to give this declaration, so as not to incur any responsibility. After the expert has accepted an obligation he must discharge it completely and carry out all the rulings. Otherwise he may be fined and even made to pay damages. If summoned as a witness he must obey this injunction. However, the physician who has witnessed the deed, or attended to the patient may refuse, if he has promised secrecy. Otherwise, he must answer as a witness. A physician who is summoned as a witness must not fail to appear. Failing to obey the summons, he is punished according to the common law. It is understood that he cannot answer in regard to points which seem to him to violate professional secrecy. The law has distinctly specified the differences existing between the expert and the witness. The witness states a fact; the expert expresses an opinion. The witness of a deed, act, or crime, is the only person able to say what has occurred, what he has seen and heard; hence, he cannot be replaced. The expert may be replaced, any other expert being able to accomplish the same task and to assist the ends of justice. A witness who is convicted of not having spoken the truth is punished by the law. The expert cannot be prosecuted for having expressed an opinion which is sometimes con-

trary to that of another expert. He alone is master and judge of his statements and opinions. Experts must have pursued special studies and they must show intelligence and judgment. They alone can appreciate the weakness of their knowledge, and compare it to the exigencies of expert testimony. The ends of justice are better served by prudent reserve than by ridiculous arrogance and presumption. The law makes a distinction between fees due to medical experts and witnesses. The expert receives special fees for visits, reports, etc. But the physician summoned before the courts on account of his statements, visits or reports, is no longer considered as a professional, but becomes a general witness, and is remunerated accordingly.

Intervention of the physician in criminal proceedings, upon the request of the defense: The physician is not invariably summoned by the judicial authorities; he may be called upon to render testimony at the request of the defense. These cases require extreme circumspection, and all intervention should be governed by the greatest caution. The physician may be consulted by the defense in civil or criminal proceedings. He has the right, and even the duty to interfere in a process, whenever he believes his intervention necessary for the establishment of the truth. Serious considerations and the idea of preventing the perpetration of an injustice, should alone cause the physician to lend his support to the defense.

*England.\**—The obligations of the expert witness are not so easily defined as those of the common witness. Hypothetically the knowledge possessed by an expert, who has no personal acquaintance with the facts relating to a given case, is his own property, and therefore he ought not to be obliged to part with it against his will. This view has been taken by more than one judge. Lord Campbell ruled that a scientific witness was not bound to attend on being served with a subpoena. Justice Maule ruled that an expert is under no obligation to give evidence before a court of law. Unfortunately for experts, the difference of opinion with which they are proverbially accused, pervades the judicial bench. Other judges have ruled that wilful neglect of a properly served subpoena constitutes contempt of court. In the face of decisions so adverse, it is difficult to determine what the law on the subject really is. It is probable that an expert who had no personal acquaintance with a

\*J. Dixon Mann, *Forensic Medicine and Toxicology*, Second Edition, London, 1898.

case might neglect a subpoena without rendering himself liable to attachment for contempt of court, but he might render himself liable to an action for damages. Such an action, though futile so far as obtaining a verdict goes, would subject the defendant to much trouble and to some pecuniary loss in defending it. Having regard to the uncertainty of the results, the safest course would be to obey the subpoena under protest. Previous knowledge of the facts of a case preclude a witness from taking any possible advantage of the statute of an expert witness. There is no doubt as to the obligations of a witness so situated; he must obey a subpoena in his capacity as a common witness, although the evidence he is going to give may be of an expert character.

When giving evidence solely as an expert the witness acts as an interpreter of facts without having personal knowledge of them; usually a medical witness acts both as a common and as an expert witness, his skilled or expert opinion being founded on facts that he himself has observed, before giving purely expert evidence—that is, evidence founded on facts of which he has no personal cognizance—it is necessary that the witness should have heard the facts on which he expresses an opinion stated on oath before the court. A medical man acts as a common witness when he gives evidence as to the condition of a wounded person examined by him. In such a case his duty is to describe the nature of the wounds, the general condition of the patient, and other circumstances that he observed at the time he made the examination. A common witness is obliged to give evidence if legally summoned to do so.

*Scotland.*—There are certain differences with regard to legal proceedings in Scotland as compared with England. The procurator fiscal performs the duties undertaken by the coroner in England, but without a jury. If a dead body is found, or a case of suspicious death occurs, the procurator fiscal, on being informed, has the power of directing a medical man to make an examination of the body, and to forward him a report dealing with the case, all such reports being certified by the reporter "on soul and conscience." If the medical examiner is satisfied with the external examination he may certify to the procurator fiscal without making an internal examination. If a complete examination is requisite, the procurator fiscal issues a warrant to the medical practitioner who has already seen the case, and usually associates with him another practitioner of experience.

The warrant is countersigned by the sheriff or justice, and empowers the holders of it to take charge of the body, and to make such examination as the law requires. To ensure completeness of examination the Crown Office in Scotland issues a form of instruction to medical inspectors, which contains elaborate directions for making the necropsy.

A medical practitioner, whether previously acquainted with a given case or not, cannot refuse to be precognosed (privately interrogated) if duly cited to that effect. Refusal is met by a further warrant, and in case of contumacy, by imprisonment.

The fee for attendance at high courts of judiciary, or the sheriff criminal court, is a guinea per day, if the court is held in the town in which the medical witness lives. If the witness comes from a distance he is allowed two guineas per day, both for actual attendance at court and also for each day occupied in traveling to and fro, with a guinea per day for traveling expenses.

*Austria.\**—The government, in judicial cases, calls upon physicians, as medical experts in the widest sense of the word, charging them with special obligations. Any physician who is called upon by the courts as a legal physician—*i. e.*, for the rendering of expert medical testimony—is forced to obey the summons. If an expert does not obey the summons, or refuses his assistance at the inspection of the precincts, he is liable to a fine of 10 to 200 kronen. Physicians must *not* be examined as *experts* in those cases where they cannot be examined, or sworn as witnesses. According to the rulings of the Justiz-Ministerium (1853). The professors of the Medical Faculty are not to be employed as experts in criminal proceedings, or at least not to be detained longer than absolutely necessary—unless required by the importance of the case or other special circumstances. This ruling was renewed by the Justiz-Ministerium in 1894. In order to avoid superfluous requisitions of college professors, the Justiz-Ministerium has ruled that faculty estimates are not to be demanded for points of minor importance.

Concerning the utilization of expert medical testimony from a faculty, the Justiz-Ministerium has ruled (1901) that the judicial authorities are to state exactly which points are to be considered in the estimate. Expert testimony rendered by the medical faculty cannot be reexamined by the physi-

\*Netolitzky, Oesterreichische Sanitätsgesetze, 1907. *The Physician as an Expert Before the Law.*



cians assisting in the chief transactions (1875). By the ruling of the Justiz-Ministerium of June 1st, 1895, the courts were informed to the effect that the Chief Sanitary Council may be requisitioned in forensic questions only by way of the Justiz-Ministerium.

In coroners' autopsies army surgeons may be employed as experts, in urgent cases, no civil practitioners being available; on the other hand, civil practitioners may act in military courts, under similar conditions. In a forensic autopsy the physician who was in charge of the case may be called upon for information, but for the sake of impartiality he should serve as the special medical expert.

The permanent appointment of experts is the prerogative of the tribunal where the expert desires to be appointed. These experts may use a signature around their private seal, expressing the quality of the physician as a medical expert. Those physicians who are not permanently appointed and sworn as such, must be sworn before the ocular inspection with the reminder carefully to examine the object, faithfully and completely to state their observations, and to render their findings and testimony to the best of their knowledge and capacity, and according to the rules of their science.

According to paragraph 118 of the St. P. O., two experts *should* be called upon as a rule for the ocular inspection; but at a medico-legal autopsy, *two* physicians *must* be present, one of whom may be a surgeon. Protocols must be made in regard to all the judicial proceedings belonging to the preliminary examination. No essential erasures, additions, or changes may be made in what has been written, and passages which have been crossed must still remain legible. Essential additions or corrections are to be noted on the margin of the protocol, or in the addenda. The rendering and form of the protocol incorporating the medico-legal findings is of great importance, when the examination is conducted by the judicial physician alone, in the absence of members of the law. The expert testimony should as a rule be subjoined directly to the findings, and may be postponed only in especially difficult cases. As a witness the physician cannot be called upon to render expert testimony as to the degree of an injury, etc., this belonging to the domain of the judicial physician.

In the chief transactions, the following regulations enter into consideration for the physician, as a medical expert: The experts

are reminded of their oath, or sworn, respectively, according to paragraph 241 St. P. O. The president may order the experts to remain in the court room during the examination of the defendant and the witness. When experts or witnesses fail to appear at the chief transactions, notwithstanding the summons, then the court may ordain their immediate production, at the same time imposing a fine and the payment of damages for the session which has been frustrated by this non-appearance.

A new schedule of fees for medical experts in criminal proceedings was established by the ruling of the Justiz-Ministerium of March 20th, 1901, which abolished the older rulings. The older schedules made a distinction between slight and severe injuries, in regard to the fee. The new schedule has dropped this distinction, and distinguishes simply between simple and complicated examinations.

The Austrian legislation has similar rulings as those in validity in Germany, in regard to the obligation for rendering expert medical testimony before the courts. The physician who does not obey the summons for functioning as an expert is threatened with a fine of 5-100 florins. He is likewise subject to a fine if he fails to appear at the time of the chief transactions. He may actually be sentenced to bear the costs of the adjournment, and a warrant of habeas corpus may be served upon him.

*Germany.\**—All countries do not enjoy the same advantages as the majority of the German provinces, which possess especially appointed sworn physicians for the handling of all medico-legal or sanitary business. In highly civilized countries, such as England, France, Italy and others, a very wide scope is left to the arbitrary measures of the courts. In a given civil or criminal case, in which the judge requires elucidation such as only the physician can supply, he calls arbitrarily, and according to his own decision, upon one, two, or more, physicians from the immediate vicinity, or a greater distance, whom he charges with the investigation and delivery of reports. Sometimes he is led by personal confidence, or again by the professional reputation of a universal favorite, no matter if the great physician or surgeon has made a particular study of, or is ordinarily familiar with death from strangulation or drowning, the respiration test, the criminal code, etc. Devergie and Taylor, from personal experience, describe in

\*I. Schmidtman, Handbuch der gerichtlichen Medizin. Berlin, 1905.

vivid colors the shortcomings of similar procedures, which are indeed evident to any observer. As a certain practical improvement, a modification has been introduced in Paris and many other localities, to the effect that every judicial court assigns once for all a definite number of certain physicians, from among whom the required experts are called upon, so that these gradually acquire the necessary practice and experience in medico-legal questions, as well as sufficient interest in the subject to keep up with its progress. Here again, however, all strict rules and regulations are lacking, every new court-president being enabled to make other dispositions as he may see fit.

Conditions differ in Germany, where the medico-forensic regulations afford reliable security to the judge as well as the opposing parties, in civil as well as criminal procedures; for, although according to the rules of the German "Civil and Criminal Process Regulations," in validity since 1877, the selection and the determination of the number of the experts to be called upon, is left to the judge—still, whenever experts are publicly appointed for certain kinds of expert testimony, other persons may be selected only when special circumstances require it. Hence, without interfering with the option of the court in a given case, in the first place those physicians are to be called upon as experts, who have been appointed as "judicial physicians" of a definite jurisdictional area, upon the basis of their specially tested qualifications.

Repeated expert testimony from these officials, or expert testimony from other experts, according to the legal restrictions, will follow as a rule in those cases only where the testimony has been regarded as insufficient, or when the importance and difficulty of the case justify procuring the testimony of a special authoritative committee, such as the medical colleges, or the scientific deputation for medical matters, in Prussia. This applies especially to those cases where contradictions exist between the testimonies of different experts. The majority of the German countries are provided for these cases with an expert committee, which can be called upon above the testimony of the expert or experts of the first instance.

The position of the judicial physician has changed in the present time as compared to the past. The requirements of science have increased in regard to its qualifications and his work, while the public and verbal court procedures no longer permit him to prepare himself in the seclusion of his study, and to

consult with standard authors, for his testimony. Present methods demand that he be always ready to exhibit his knowledge, and that he moreover possess the gift of expressing his opinion and his reasons clearly and convincingly by word of mouth.

As a publicly appointed expert for the giving of medico-legal testimony, the physician is held to obey the challenge of the court, and hence he is personally interested in rendering his knowledge so manifold and erudite as to enable him to answer any question pertaining to his domain and placed before him by the judge, or to cope with any problem of expert testimony, though it sometimes encroaches upon rather remote fields. Up to a certain extent these requirements apply also to the general practitioner, for Paragraph 75 of the Criminal Code in its general wording, also admits his nomination as an expert, where it rules: Whoever is assigned as an expert must follow this nomination. if he has been publicly appointed for the giving of expert testimony, of the required character; or if he publicly and as a business exercises the science, art, or trade, knowledge of which is the presupposition of the expert testimony; or if he is publicly appointed or licensed for the exercise of such. Furthermore, the rendering of expert testimony may be required from him who has declared himself ready to deliver such testimony before the courts. By this ruling the legislation at the same time provides against the contingency that no one might wish to act as an expert in a given case.

With special reference to the obligation of appearing as an expert before the court, the summoning of an expert may take place immediately, also on the part of the accused; the person summoned in this manner being bound to appear, provided the legal indemnification for traveling expenses and loss of time is offered in cash at the time of the summons, or the sum has been deposited with the clerk of the court. If the nominated expert wishes to be excused from this legal obligation, he must enter a plea, advancing valid reasons for his refusal, acceptance of which is left to the discretion of the judge, according to the wording of paragraph 75. The German Criminal Code does not literally state an obligation on the physicians' part to be examined as an expert by the police. The "Oberverwaltungsgericht" (chief administrative tribunal), however, assumes this obligation for Prussia. (Hellweg, Strafprozessordnung. Berlin, 1892. page 228.)



*Prussia.*—The judicial physicians in the first instance used to be the district physician and the district surgeon. Since September 16th, 1899, special medical officials have been appointed, in the shape of the judicial physician, the district physician, and the assistant district physician. These individuals are officially appointed in the first place to attend to medico-legal affairs. A certain preference is further accorded to those who have passed the examination for district physicians, in so far as they are recommended as experts, when regularly installed physicians cannot be procured. Paragraph 9 of the corresponding law rules: The district physician is the judicial physician for his district. Whenever special conditions require it the discharge of legal matters may be conferred upon special judicial physicians.

The reorganization of the Prussian Medical Administration takes especial account of the education of medical officials. The increased requirements for obtaining the qualifications for service as medical officials, afford a guarantee for the necessary general medical education as well as special preparation along the lines of forensic medicine, and the rendering of reliable expert testimony in foro. This explains and justifies the joining of medico-legal and sanitary functions in the person of the district physician.

Only in large cities, and in those industrial areas where the district physician is kept very busy otherwise, by his professional obligations, the interests of a systematic legal administration have rendered it advisable to appoint special judicial physicians. In the localities provided with special judicial physicians, the district physician and the special judicial physician accordingly act side by side in forensic matters. Both are the judicial physicians called upon to assist at coroners' autopsies. In regard to the order of succession which is to be observed between the district physicians, the installed physicians especially appointed as judicial physicians, the assistant district physicians and the independent practitioners, the authorities in charge are guided by the edict of the minister of justice, dated January 25th, 1902, which states concerning the selection of the second physician to be called upon for autopsies:

(A) Besides the specially appointed judicial physician, the second judicial physician, otherwise the district physician.

(B) Besides the district physician, the assistant district physician; otherwise the installed physician of an adjoining district.

A regulation is further recommended to the effect that the regular collaboration of two district physicians of adjoining districts should take place in such a way that each one, as the corresponding judicial physician, has the other one assigned to him as a second expert. In so far as the requisition of independent practitioners, who have passed the examination for district physician, becomes imperative, it is regarded as advisable regularly to employ a certain physician as second expert, so as to enable him to acquire the practice and experience needed for this work.

The guides for the selection of the second physician in autopsies are supplemented for special cases, in such a way that between a district physician, and a special judicial physician in an adjacent district, as a rule it is the latter who should be called upon to assist in the autopsy. Exceptions are justified by the question of expense and greater accessibility of the district physician.

Up to the present time there has been no further separation of the forensic duties, which are to be referred to the special judicial physician, and the district physician residing in the same town. Even if the regular consultation of the special judicial physician for all legal testimony were to be regarded as theoretically justified, still certain practical considerations would necessitate more or less far-reaching exceptions in favor of the district physicians. Their experience, broadened by practical knowledge, will prove essential in the discussion of medical and sanitary affairs (Board of Health) before the courts, the district physician having acted as a superintendent or police consultant, or as a member of the Board of Health, etc. He will have to be regarded as the competent expert, for instance, in judicial verdicts and infractions against preliminary regulations, as laid down in the interests of public health, police statutes, etc. It is therefore in the interest of public sanitation that the district physician should be well informed concerning similar legal decisions, and this is best obtained by his attendance at the court transactions. Hence, for practical reasons, the district physician will be called upon in the first place, in matters of the medical and sanitary police, which are transacted before the courts, the special judicial physician being consulted in exceptional cases only. On the other hand, the judicial physician will be the regular expert called upon in the field of legal medicine and psychiatry, especially for inspection of cadavers; the examination of parts of ca-

davers as to the presence of poison; criminal abortion, mayhem, bodily injury, the determination of sexual conditions, the estimation of the mental condition in civil and criminal proceedings, and for the declaration of incompetence.

The appointment of special judicial physicians, according to the ideas of the Prussian Medical Administration, aims moreover at an equally necessary and desirable furtherance of forensic knowledge. This is to be more particularly secured by the discharge of the forensic functions through professors of the universities.

If, according to what has been stated above, chiefly the installed physicians enter into consideration as legal experts, this does not mean to say that they alone are active along these lines. The judicial regulations permit that the general practitioner may at any time be placed in the position of acting as a legal expert, provided the judge deems his summoning to be indicated for "special considerations." The physician who has known the prisoner and his family from early youth, or who has treated him during a long illness, will certainly be especially well able to render a valuable testimony in regard to the personality or illness under consideration. The private physician who was the first to be summoned to an accident case, one of injury or death from direct violence, etc., has had an opportunity for observations which is denied later arrivals upon the scene. Thus he may render testimony before the judge, which being based upon his personal impressions, is often of greater value than the testimony of an expert, who is obliged to base it upon a study of the documents. Conditions of a similar character may lend especial value to the testimony of this particular physician, justifying his summons ahead of the installed physician. For this reason private physicians are summoned before the courts, not only as "expert witnesses," but also as medical experts, by the court, the district attorney, and the lawyer for the defense, in civil and criminal proceedings, as well as in minor and very grave matters before the jury.

The assistance of the regularly appointed experts is insisted upon by the law, without exception, for one very definite procedure alone, meaning the medico-legal autopsy of human cadavers. A judicial autopsy, according to paragraph 87 of the statutes for criminal proceedings, must take place in the presence of the judge, and it is to be performed by two physicians, one of whom must be a judicial physician. The signifi-

cance and importance of precisely this forensic proceeding follows—aside from the above mentioned regulation—also from the fact that in Prussia, for instance, the correctness of the testimony is still further controlled by the review of the autopsy findings on the part of the government medical-counselor (*the medizinal-kollegium*) and the scientific deputation for medical matters.

The business routine is as follows: Copies of all autopsy proceedings, as well as of the transactions concerning doubtful mental conditions, are forwarded by the judicial authorities to the district government. As soon as received, they are submitted to the technical examination of the government medical-counselor. In case such essential faults and inaccuracies are found as to threaten a detrimental influence upon the criminal investigation, or the civil process, the testimony which is objected to is at once forwarded to the "medizinal-kollegium" of the corresponding province, on the part of the government president, the court being informed at the same time of the objections which have arisen. Should the immediate examination by the "medizinal-kollegium" serve to confirm the doubts as to the correctness of the testimony, then the government president as well as the courts are at once informed to this effect, and a copy of the autopsy proceedings, with the annotations of the "medizinal-kollegium," is forwarded to the administrator for medical matters, who in his turn causes the conclusive examination by the scientific deputation for medical matters.

All other transactions, forwarded by the courts to the government president, which have not given cause for the objection in the examination by the government medical-counselor, are collected and forwarded monthly to the "provinzial medizinal-kollegium," for purposes of revision.

The *regular* conclusive examination of *all* the autopsy proceedings investigated by the "medizinal-kollegium," through the scientific deputation for medical matters, has been suspended, and since 1887 is limited to the final examination of the annual collection of individual provinces, which are requisitioned for the purpose. The higher forensic authorities assist as a rule only in criminal cases and declarations of incompetence, however. In civil processes, on the other hand, their action can be called upon, with the consent of the administration of medical matters, in those cases alone where public interests are involved in the decision of the process.



Similar principles prevail in matters of accident insurance; in differences pending before the insurance committees, as regards the authoritative estimate of these higher places. Here also their requisition must be absolutely demanded for the elucidation of the *status presens*, by a preponderating public interest, and recourse to them must be based upon a detailed explanation of the conditions.

Furthermore a limited coöperation of the (*Aerzte-Kammern*)—Board of Physicians—may take place for the rendering of an estimate, in accident matters of corporations, in such a way that in each individual instance, a chief expert is nominated upon request from the “*Aerzte-Kammern*.” The Prussian “*Aerzte-Kammern*” are forbidden, on the other hand, to form special conclaves of experts, or to nominate in a general way a number of physicians as chief experts, to serve as occasion demands.

*Bavaria and Other German States.*—Similar rules and regulations for the rendering of conclusive forensic testimony, as those in force in Prussia, likewise prevail for the rest of Germany. In Bavaria, for instance, “medical committees” are formed for the purpose by the medical faculties of the universities. In other states of the union, professors of the state-university (Alsace-Lorraine), or professors of neighboring universities (Sachsen-Altenburg, Schwarzburg-Rudolstadt, Schwarzburg-Sondershausen, Reuss older and younger line) are called upon as chief experts.

The suggestion of the Medical Society of Massachusetts that the names of fifty (50) medical men in good standing be offered to the Chief Justice of the Supreme Court by the three medical societies of the State, who shall act as independent experts for the court, is a very plausible plan. The society, in its suggestion, does not prevent either the prosecution or defendant from employing such experts as they desire, and thus the defendants’ rights are not cut short. The bill before the commission of New York already spoken of is one in the right direction.

The chance of obtaining an early change in the method of securing expert testimony in this State is not great, unless we take the matter in hand as a society. We have nothing to hope for from the courts. They are impotent in the matter. We have nothing to hope for from the bar, for it is taking an important prerogative from them, by which they have been able in the past to mislead the jury, or at least to weaken the argument

of their opponent. We have little to hope for from the Legislature, because our influence is almost *nil* as compared to that which the bar exerts.

We must act in self-defense. I beg of you to consider this matter most carefully and at another time I hope you will see your way clear to add a paragraph to your code of ethics, or your by-laws, as you see fit, which prohibits any member in good standing in this society from giving expert testimony, unless appointed or forced to do so by the court, which testimony it shall be understood shall be entirely impartial but subject to cross-examination.

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### ORATION ON SURGERY.\*

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#### When Shall the Physician Distrust His Own Judgment in Surgical Matters?

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In response to your kind invitation to make an address upon Surgery, I thought immediately of the things which interest me most in my daily work—of teaching young men the principles and art of surgery, of the surgery of diseases in general, and of certain lesions in particular. But, after all, I said to myself, what is it that I encounter in the practice of medicine and surgery which is of the greatest importance and of the greatest possible interest to the one most concerned? Is it not the patient’s best interests? And in what way, if any, can we improve upon the present methods of treating him? In answering frankly I was obliged to admit to myself that what the patient in general most needs is staunch and friendly coöperation on the part of physician and surgeon, so that he may have the benefit of what is best in the work of each. As in a general hospital, the poorest patient may have the combined skill of many experienced men, so in private practice the patient may similarly have the benefit of a united force against a common enemy. Our endeavor should be toward concentration of effort, toward team play, rather than toward individual brilliancy.

In reviewing recent experiences I have been concerned more than ever by the

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fatal errors of diagnosis. Whatever we may say and think about matters of medical and surgical progress; however much we may be impressed by the necessity of originality in treatment—the first thing in common diseases like typhoid fever is to recognize the diagnosis early enough, say, to try some way of checking the disease. In chronic diseases like cholelithiasis, or in the commonest form of cancer—cancer of the stomach—is it not essential, for progress through new methods of treatment, that the disease be recognized at its inception? And in the borderland cases—like myelogenous splenic leukæmia or like Hodgkin's disease—what is more essential than the earliest recognition of the lesion?

I see every day the evils of disease that has been unrecognized until it is too advanced for treatment. In my special work I see, of course, the errors of diagnosis in surgical cases. But are they all the errors of physicians? Far from it. They are errors of surgeons and specialists as well, and of myself in particular. In trying to put the physician on his guard against the errors of medical treatment as I have seen them, I am able to illustrate human fallibility best by emphasizing my own in the same field.

The physician as well as the surgeon—indeed, much more than the surgeon because he is first on the field—must distrust his own judgment under certain conditions. He must be on his guard (1) in diagnosis, (2) in prognosis, (3) in treatment: in *diagnosis* when error means death; in *prognosis* when he thinks there is "no use," that death is inevitable; in *treatment* when prognosis is interrupted.

Each theme is full of suggestions to the experienced surgeon. I do not know that I could take a better text than that embodied in a student's answer to a question in a surgical examination. "In all cases," said the student, "do what is best for the patient; consider his condition first." This comment of a bright young fellow sounds like a remark of a graduating school girl in her class day essay on Truth or Virtue or Charity—the expression of a youthful intellect, fresh from home and mother and the Sunday school; and many of us smile an indulgent, not to say pitying smile, and think how impractical are the ideas of youth, how soon they will be changed in the actual affairs of life, especially in "business"; how beautiful and ideal in theory, how commonplace, not to say ridiculous in actual practice!

And yet what was this young man saying? He was giving the very best practical advice to one beginning a medical or surgical career; he was indicating the best professional policy for a successful life, regardless of the man's belief in the abstract virtue of the Golden Rule. I believe not only that honesty is a virtue essential to the life of a gentleman, but that it is the best policy for purely selfish advancement; and therefore I believe that a man entering upon practice could do nothing more effective in establishing that practice than to follow strictly the trite advice of my student: "Always consider the patient's welfare first and your own last."

I feel very strongly that many of us consider too much our own reputation and our professional success before the lay community; that we therefore consider too little the patient's point of view, when our interests conflict with his. When we see in a desperate case nothing but failure, we are too apt at times to shirk it, especially if the responsibility for hopelessness rests upon other shoulders, whether broad and strong or narrow and weak. To illustrate my meaning, take the attitude of many surgeons toward physicians who send too late in cases of appendicitis, or who have used methods of treatment of which the surgeon does not approve.

A prominent surgeon told me some years ago that when he was called to a patient with appendicitis to whom the physician had given morphine he always had urgent business in the opposite direction. The physician, he said, had got the patient into his scrape, let him take the responsibility of getting him out of it. Since that time, and no later than this last spring, I have heard men say that they would not touch a case of general peritonitis that was evidently hopeless. "Let the responsibility of the death rest on the physician who allowed the patient to get into that condition. I will not take it."

I have many times been confronted by the really distressing problem whether or not to operate in an apparently hopeless general peritonitis. My experience in general peritonitis in the beginning was very largely that of struggling against the inevitable. I have said many times—and I repeat it here—that there are many cases of that and other diseases in which the patient's only hope lies in not operating; for operation, even the briefest, like the administration of a general anæsthetic, is at times enough to turn the scale against the



patient. I believe that operation under a hopelessness so evident should not be performed: First, for the patient's good; secondly, for the good of the art of surgery; and, last of all, for the protection of the surgeon's reputation.

Up to the era of modern surgery operations were, of course, confined to easily accessible regions. Hence the relegation of external pathology to the surgeon; internal, to the physician. Now it is a highly reasonable proposition that the pathology of all diseases—internal and external, accessible and inaccessible—is the same, essentially; that the gross manifestations of that pathology are similar, wherever situated, influenced only by considerations of environment and normal anatomy. Cancer of the lip, for example, slow in inception and in growth, is the same thing as cancer of a contiguous organ—the tongue, which is rapid in growth and brief in inception. Cancer of the pylorus is undoubtedly slow in initiative and in development, whereas cancer of the liver, whatever may be its origin, is swift in both. It is a reasonable inference, therefore, that cancer, wherever situated, is practically the same thing as to etiology, onset, and evolution. And so today cancer, whether accessible or inaccessible, is curable or not according to environment and the possibility of extensive removal.

The physician in the old days was familiar with external pathology requiring surgical treatment. The surgeon knew little else. The physician had to be familiar with internal pathology, for the external lesions were all surgical.

To-day the physician must still know internal diseases, but he must know them vastly better than before. Surgery is invading more and more deeply even the most inaccessible regions of the body. The surgeon must know the various lesions not only as he knew them when the diagnosis was largely guesswork, but as his knife will now demonstrate them. As the field of obscure diseases becomes more thoroughly studied in the light of surgical exploration, he cannot but become more expert in diagnosis, if he avails himself of his opportunities of observation. And as his field of purely medical diseases is constricted, so much the more chance has he of becoming expert in what remains for him to do. In distrusting his own judgment, he must be wide awake, not only to the diseases of his own field, but to those of contiguous fields; not only to the widely differing lesions of

the extremes of medicine and surgery, but to the cases which occupy the borderland between them. In one sense his field is narrowed; in another, it is widened.

The surgeon's methods of education in diagnosis may well be imitated by the physician, for the observations and deductions of the latter are, as a rule, not subject to *control*. I use the word *control* in the sense of impregnability. A diagnosis is under control only when it has been made impregnable and therefore unquestionable—when, for example, in definite lesions of the pylorus, the diagnosis has been *gastric ulcer* and not *gastric cancer*; and when the gross appearances of living pathology have confirmed the diagnosis; and when, finally, if possible, the laboratory research has unquestionably settled the pathology.

The surgeons, especially the most experienced, have learned to distrust diagnoses, and to be charitable toward the mistakes of others; and I am inclined to think that it would be a good thing for medical men generally to see their diagnoses in every possible instance placed under an impartial control, for I am sure that there is too much intolerance in reviewing the errors of diagnosis.

Now, as always, the physician in general practice is the one who first encounters disease, whether medical or surgical. Upon his shoulders rests the responsibility of assignment, whether to medicine or to surgery or to a specialty. The time has passed, I believe, when it is possible for any man to acquire a reliable familiarity with all diseases, so that he can tell with reasonable certainty in the given case the diagnosis and the prognosis. But he must in every case be able to decide questions of curability by medical as contrasted with surgical methods.

When must he distrust his own judgment in diagnosis?

Many years ago in Boston a physician of large practice and great common sense advised strongly against operation in the case of a bright, clean-blooded girl who was afflicted with tuberculosis of the right breast. She was under medical treatment for a long time. She became worse in Europe, where she was subjected to a bungling and inadequate operation. When, after some years, she came under my care, I was obliged to subject her to extensive dissection of breast and axilla; right and left subclavian triangles; and, finally, extirpation of a tuberculous kidney containing calculi! This case is illustrative of many in which the golden

moment for operation is allowed to pass—cases not only of tuberculosis, but of cancer, sarcoma, and many other neoplasms, both malignant and benign—to say nothing of the lesions of mechanical origin and development—gall stones, kidney stones, strictures and infections.

The errors of practice, both medical and surgical, are in the first instance errors of prognosis. In the case just cited the physician relied upon medical rather than surgical treatment for a perfectly accessible form of tuberculosis. It may be said that this patient would have had tuberculosis of the kidney—not to mention the axilla and neck—from its original focus. But, wherever that may have been, the first perceptible lesion was in the breast, and I cannot but feel that, had the disease been in the beginning thoroughly eradicated by a broad dissection, the other evils would not have followed. The prognosis was wrong, and possibly the diagnosis.

We all make errors, I freely admit; but my contention is that the errors of surgery in the hands of those qualified to practice surgery are very insignificant compared with the successes. It becomes us to admit with the greatest possible frankness the errors, that we may be able to bring into sharp contrast with them the successes, and that our words may have as far as possible a judicial effect.

In external pathology the errors which I see most frequently are the result of a too favorable prognosis, based upon a wrong diagnosis. I have seen so many mistakes in the diagnosis of tumors which were to me glaringly conspicuous that I cannot but speak strongly upon the subject. It is a conservative estimate, I am sure, to place the number of operable new growths allowed to go from a stage that is favorable to operation to one that is unfavorable or hopeless, at ten per cent. at least.

By far the largest proportion of errors are in the hands of physicians who are not experts in the diagnosis of tumors. In many of the cases malignancy is suspected, but the wish is father to the thought, and hope that they are non-malignant biases the judgment, and the patient comes to me far advanced in malignant disease. Error in the diagnosis of tumors is common. In many cases it is impossible to distinguish between a benign and a malignant tumor. That my hearers and readers may appreciate the difficulty of accurate prediction, the frequency of errors, and the impossibility of always avoiding them, I will refer

briefly to a number of mistakes that I have made myself.

But first let me say that the older we get the more charitable we feel toward error. I know of no more intolerant physician than the man who is just beginning his practice, and I know of no more tolerant and charitable physician than the man who has had many years of intimate contact with disease.

In recent years there have been a number of cases like that of Miss H., who was operated on for a benign growth of the left breast in 1902. In 1907 I found a small growth in the upper part of the left breast, which I pronounced undoubtedly benign—the same as the first growth. A year later—about a month ago—to my horror, this tumor presented all the appearances of cancer. It was, in fact, medullary cancer. In this case either I was entirely mistaken in the nature of the growth removed in 1902, or the tumor of 1907 was entirely independent of the first. There was no difficulty whatever in making the diagnosis in 1908, but in 1907 the tumor had every appearance of benignancy.

A similar case was that of Mrs. L., upon whom I operated in January, 1905. I had removed from this breast a benign tumor some years previously. Cancer appeared in the scar. A painstaking microscopic examination of the first tumor showed benignancy. She died miserably of recurrence in the spinal cord.

In a young man I made a diagnosis of umbilical hernia, and did not urge operation. A year later I operated in this case and found, instead of an incarcerated omental hernia, a melanotic sarcoma.

It seemed to me early in my experience that a tumor once benign must be always benign and that a reliable opinion on benignancy should be a trustworthy guide for the future. But the past few years have shown me many transformations from benignancy into malignancy. Just what or whom to distrust I am not fully decided, but I think it should be the nature of neoplasms.

When one finds malignant masses in the bladder and pelvis two or three years after a simple supra-vaginal hysterectomy for fibroid, when he is armed with an accurate history of his patient and her operation, with a diagnosis based upon his own observation of the gross pathology, confirmed by the opinion of an expert in microscopic findings, when the post-operative history shows early occurrence of masses infiltrating the



operative field—he cannot but distrust both diagnosis and prognosis even in the hands of the most expert; and furthermore he cannot fail to distrust even the opinion of the most experienced pathologists.

On November 30, 1903, I operated on a married woman of 43 for multiple uterine fibroids by amputation above the cervix. At the same time I removed the appendix. All the abdominal organs were normal. Dr. Whitney's report was "Fibromyomata." In January, 1908, I found in the left of the pelvis a tumor which apparently involved the bladder and the whole left side of the pelvis. There is now, as nearly as I can judge without operative exploration, an infiltrating malignant tumor.

A second case, that of Mrs. H., I operated upon in October, 1903. The patient was a woman of 49 and the diagnosis was multiple fibroid. The uterus contained a fibroid and other tumors which were pronounced by Dr. Whitney to be large, round-celled sarcomata. The patient died in December, 1904, with metastases in the lungs. In one instance after a removal of a fibroid of the uterus by amputation above the cervix through the abdomen I have seen cancer of the cervix. It is, of course, just as probable that cancer should attack the cervix left from the suprapubic amputation of the fibroid as that it should attack any other cervix, but, as a matter of fact, such a thing is seldom seen.

How much then is the physician or general practitioner to distrust his judgment when the man whose life is spent in the study of neoplasms is ready to admit errors in diagnosis, prognosis and treatment? I must in reply say that he should distrust his judgment in every case when the doubtful differential diagnosis includes lesions of death or disability.

To go a step farther upon the ground of liability to error common to the most experienced, when must the expert himself distrust his own judgment in the diagnosis, prognosis and treatment of neoplasms? Must he not do so whenever he wavers even in the slightest between malignancy and benignancy, between lethal and non-lethal conditions, between comfort and disability on the one hand and complete restoration to health on the other? I am sure that he must.

Take, for example, the most frequent and most conspicuous tumors of the neck, the enlarged cervical lymph nodes. Within three days I have found instead of tubercular disease the malignant lymphomata of

Hodgkin's disease which had been treated I do not know how long for simple adenitis. We all thought the trouble a simple tubercular adenitis from tonsillar infection.

In the clavicular region a tumor of some months' standing, which we shaved from the apex of the left lung, proved to be a spindle-celled sarcoma. This patient, a man of 34, had in the clavicular region a tumor which he had first noticed five months before, and which was supposed to be of no importance.

I have recently heard, from Dr. George Ben Johnston, of Richmond, of the death of a patient from the skin of whose right breast I removed a soft, coal-black scar, with enlarged axillary lymph-nodes. Dr. Whitney reported this to be a simple pigmented scar, and the lymph-nodes to be tubercular. Dr. Johnston tells me that soon after my operation the pigmented tumors appeared all over the patient's body. The tumor was undoubtedly a melanotic sarcoma. In this case the real nature of the tumor was overlooked by every one.

Neoplasms affecting the long bones should always excite a suspicion of malignancy no matter who makes the diagnosis of benignancy—and a suspicion so strong as to indicate operation if that suspicion is entertained at an operable stage.

I have stated somewhere in this paper that the physician and the layman are afraid of us, that they see the ill results of surgery as we operating surgeons do not see them; that we, content with operative recoveries, do not see or inquire into the wreckage of health which is forced upon the attention of the family physician. I know this to be true, but especially in the patients without definite pathological lesions—the women operated upon for supposed movable kidney, chronic appendicitis and membranous colitis, the oophorectomies for pain, the gastroenterostomies for functional stomach diseases and the like.

While my experience in operative surgery for trivial functional disturbances leads me to question with the greatest care the indications for operation and usually to decide against operation, similar experiences with neoplasms has led me toward extreme radicalism both in benign and malignant disease.

I for one am frequently oppressed by the fear that in advising against the removal of a perceptible, perhaps easily accessible, tumor I may be letting slip the favorable chance for cure. My answer therefore to

my question as far as it concerns neoplasms is that if the surgeon and expert must always distrust himself, much more must the physician and general practitioner. For I have encountered in all parts of the body, under a wide diversity of diagnosis, neoplasms of the most destructive kind, in many of which there has been a delay in operating and an early fatal recurrence. I do not mean to say that the fatal ending was always owing to delay on the part of the physician or the surgeon, for it is often the inevitable loss of time from non-discovery on the part of the patient, but I do mean to say that most neoplasms are, in theory at least, permanently curable if discovered at their very inception.

The physician, then, whether expert or not in the treatment of neoplasms of all kinds and in all places, should always distrust his prognosis unless it is based upon evident inoperability and impending death. Even when the diagnosis of hopelessly inoperable cancer has been made not a few examples of mistaken diagnosis could be given—mistaken diagnosis on the part of the most experienced followed by non-operative recovery. For example, I once made a diagnosis of cancer of the pancreas and gave the family a grave and practically hopeless outlook. The patient lived to laugh at me.

I remember a case of cancer of the face at the Massachusetts General Hospital, which was pronounced inoperable and hopeless by the whole surgical staff. The patient recovered perfectly under I know not what medical treatment. I once saw a case of supposed epithelioma of the neck that was operated on so many times that it finally became practically inoperable. The patient recovered under a few weeks' treatment by iodide of potassium.

When to distrust one's judgment in neoplasms seems, then, a simple matter, for we must always distrust the solution of a doubtful question when one solution may mean death and when the other means almost surely recovery.

When shall a man distrust his judgment in surgical infections?

Here we have a topic of infinite importance, the discussion of which cannot but interest every critical observer. In the treatment of infections everything depends upon the diagnosis and almost everything upon the swiftness and accuracy of that diagnosis, for upon the diagnosis rests the prognosis and the indications for mechanical treatment.

Under surgical infections are included most of the grave emergencies of surgery. All lesions which are necessarily accompanied or followed by bacterial invasion, whether localized or general, must be considered at least from the surgical point of view. From this point of view, therefore, must be discussed not only external infections—like felon, palmar abscess, dissecting wounds, malignant pustule, and parotitis—but internal as well—like cholecystitis, meningitis, gangrenes and necroses, not to mention the wide diversity of lesions causing peritonitis, localized or general. In all infections usually called surgical, the diagnosis is of the utmost importance, for no man can predict a safe outlook so long as the diagnosis is in doubt.

I suppose that most of my audience have seen those fulminating infections, which, starting in a pin-prick, have resulted in a few days in the loss of life or limb; or which, starting in anthrax as a trivial pustule, quickly hurry the patient to the grave. Every now and then a slight wound results in a local and general infection which quickly overwhelms the patient.

How is it possible to predict such a course, and how can we be forewarned and forearmed? Last year a powerful young man had a black-head pressed out of his neck with a watch key. In twenty-four hours he had a deep cervical phlegmon; in forty-eight, he had difficulty in swallowing and in breathing; his constitutional infection was extreme. Under cocaine I opened the deep neck, with instant relief. In less than a week the right knee joint became infected. It was drained. Later, after many ups and downs, and many varieties of treatment, including opsonins, his thigh was amputated. He finally recovered. This is a good example of these awful external surgical infections which used to be so much more common than they are now. But these things are conspicuous; you cannot help seeing them, and, with the least experience, seeing that things are going rapidly to the bad.

We have in abdominal lesions just the same variety in the source and progress of infection that we have externally. They are, however, concealed, and their living appearances are not conspicuous. But, in the case of the great abdominal viscera, the call for help is much louder and more persistent than in external lesions; and the loudest and most persistent call is pain.

The interpretation of abdominal pain requires great skill and experience. The error



lies in attributing to a functional disturbance a pain that is really dependent upon an organic lesion. The physician must distrust his judgment when he calls abdominal pain of little or no moment. Probably most of the fatal emergencies of abdominal disease could be successfully resisted were abdominal pain immediately heeded. All the infections would be at once discovered were the pain that they cause immediately and accurately interpreted.

Take, for example, within the abdomen the most common causes of death: perforations of the alimentary canal—from gastric ulcer to appendicitis; infections of hollow viscera; cholecystitis; pancreatitis; with certain rare infections of the kidney; necroses of mechanical origin—intussusception; volvulus; strangulated hernias and tumor torsions; mesenteric embolisms and thromboses, and, finally, rupture of hollow viscera, whether intestine, gall- or urinary- bladder. All of these lesions are preceded, accompanied, or followed by surgical infections. They are all accompanied by pain. They are almost all amenable to prompt surgical intervention.

The physician always encounters these emergencies first. It is for him to make his diagnosis and his prognosis. In making them he must never forget that a favorable prognosis, based upon a wrong interpretation of acute abdominal symptoms—chiefly pain—means the loss of the main chance for recovery.

Illustrative examples are at hand every day. The very last in my experience was that of a man of 74, who slipped on the stairs on Sunday. There was abdominal pain that day. The pain was less on Monday. On Tuesday he went to business. At noon his pain was suddenly worse. At three o'clock I found a spreading peritonitis, and operated as soon as possible, finding a gangrenous appendix. In three days the man was dead. No physician had a chance in this case to distrust his judgment, except myself. The diagnosis was perfectly clear, and was confirmed by Fitz. In so serious a case in a very old man the surgeon must distrust his judgment as to the wisdom of operating. I have since wondered if it would not have been better to trust to the healing power of Nature. But in an old man such a disease is particularly dangerous, and possibly the only time that the patient had a fair chance was at the time of the initial pain.

The fatalities in acute abdominal disease, then, are owing to non-recognition of early

infections, and especially of the significance of pain. The physician should distrust a judgment which predicts safety in delay.

When, then, shall the practitioner distrust his own judgment as to the diagnosis and the prognosis of infections?

When he is in doubt, and especially when his prognosis is good; when the differential diagnosis seriously considers lethal possibilities—when there is a question, for example, between acute peritoneal infection from whatever source, and a simple functional pain like indigestion, flatulence or even neuralgia; when the history being compatible he encounters a strange rapid, progressive local infection of the face or neck as in anthrax; when an acute parotitis does not immediately begin to subside; when with fever pain is severe in the depths of a finger or a palm; when severe abdominal pain is followed by a rising pulse, falling temperature and faintness. In a word, whenever there are strong possibilities of a serious or a fatal lesion which the differential diagnosis cannot rule out and for which the only or the chief hope is immediate surgical intervention, then must the physician distrust his opinion, even if that opinion is favorable.

Many physicians are afraid of us, and so are most laymen. Why? Is there in the so-called borderland case between medicine and surgery no disease in which the physician can say, "You should have turned this patient over to me. The death or disability is directly due to your rushing the patient into operation when she would have had better chances under medical treatment." And if the surgeon says so often, "This patient's desperate condition is due to delay on the part of the physician; let him take the responsibility of her death, for I will not operate"—cannot the physician justly retaliate by saying, "The surgeon has got the patient into her scrape; let him get her out; I won't touch her."

The answer, I regret to say, is that the physician can thus as justly criticise the surgeon, as in many cases the surgeon does the physician.

When shall the physician distrust his judgment in the after-care of surgical cases?

The accidents of convalescence seem to me the hardest to bear with philosophy, especially if they are avoidable accidents. During an exciting surgical operation a man may find some consolation to his conscience by the realization that the accident happened when his mind was taken up by

things directly affecting life. For example, in the course of some urgent operation for, say, internal hemorrhage or intestinal obstruction, in which seconds count, he has some consolation for the possible loss of a sponge or an instrument in the abdominal cavity; but when there is plenty of time to anticipate and prevent accidents, and he nevertheless takes no precautions against them, he must be a calloused surgeon who can review them with equanimity.

The relations between the general practitioner and the surgeon have always been, and will always be, close. Their interests are the same—the promotion of the welfare of the patient. They should work in harmony—real, cordial, downright friendship. And what concerns the welfare of the one equally concerns that of the other. Occasions will arise when the reputation and professional standing of the one will rest upon the faith and skill of the other. It is by no means the metropolitan surgeon who is always to guard the country practitioner, but far more frequently than we believe possible, it is the country practitioner who protects the good name of the metropolitan consultant. A country physician, in a taking paper on this subject, before the Massachusetts Medical Society, recently said that he had had the opportunity of protecting a Boston surgeon against the consequences of having left a gauze in the abdominal cavity, and he did this in spite of considerable provocation in certain criticisms of himself by the surgeon. It was heaping coals of fire upon the surgeon's head in thus returning good for evil. Indeed, I know of nothing that would make me so grateful as such an act under such circumstances. It is not only the results of accidents and blunders on the part of the operator that the attending physician must look out for, but it is the usual, as well as the unusual, post-operative complications of surgery. The physician must distrust his judgment whenever there is a strong suspicion of hemorrhage, or when the first evil signs of sepsis supervene; when the local signs are unsatisfactory, or when convalescence is interrupted.

Accidents of convalescence, as I have said, are peculiarly distressing. The patient has perhaps successfully undergone some dangerous operation, and has entered upon what seems to me one of the most enjoyable periods of life—that of the regaining of health, strength and happiness after a period of pain and suffering. Accidents occurring at this time are not unlike those of convalescence from childbirth, in which, with

little warning, a house of rejoicing is turned into one of mourning.

Some of the postoperative accidents come with awful unexpectedness. I have unfortunately seen not a few of these. One is instant death from pulmonary embolism. No amount of skill, experience and care can anticipate or prevent these accidents. The physician must expect them in surgical cases, as in medical. As I have seen them, they come quite as frequently in one class of patients as in another—perhaps they most frequently occur, however, after hysterectomies for fibroid in those who have long been exsanguinated.

Analogous to this complication is the postoperative phlebitis. I have heard this annoying occurrence laid at the door of surgeon, of physician, and of nurse, through humanity's tendency to blame somebody for every evil happening. But so far as I have been able to observe, there is no known cause, and therefore no means of preventing phlebitis. I see it after clean operations, chiefly upon the pelvic viscera. The recognition of phlebitis is easy; its treatment simple. The chief thing to guard against is the detachment of a clot and the resulting pulmonary embolism. But I do not believe that embolism, except in the rarest instances, starts from the ordinary phlebitis. I have seen such a case but once, and that was when I was a student, when an Esmarch bandage was applied to a leg and thigh, the veins of which were inflamed. This was done preparatory to amputation. A clot was forced into the venous current, and the man died instantly.

The chief thing to guard against in convalescence is hemorrhage. A postoperative hemorrhage, especially a preventable one, is the most awful experience in the practice of surgery. I know of nothing so unendurable as the thought that a patient may be bleeding internally, and that one ought perhaps to reopen the wound and examine the field of operation.

The physician may well distrust his own opinion in such matters, for the surgeon cannot but distrust his. In many cases a postoperative hemorrhage is glaringly conspicuous; but in the really trying case it is not conspicuous; it is uncertain, and the surgeon hesitates between the dread of a real hemorrhage and that of an unnecessary interference. Whenever, then, after a surgical operation there is the least question of undue loss of blood, the surgeon must be notified. His is the glory of success; let his be the responsibility of decision or of failure.



The subject of hemorrhage raises in my mind many spectres of unhappiness and gloom, and it cannot but prove thus disquieting to every practitioner of medicine and surgery. I have known a brilliant career to be blasted by a single case of hemorrhage. I have passed many an hour fighting against the inevitable, or, worse than all, wavering between operative and non-operative treatment, in a case of suspected hemorrhage.

The most that can be said to those in charge of a patient after operation, no matter how insignificant, is to be on their guard against the undue loss of blood. The less the cause, the greater the remorse. I have seen a patient die from hemorrhage after the repair of a cervix, and I have myself nearly lost a patient after this operation. I have seen a patient bleed to death from the pricking of the deep epigastric artery in sewing the abdominal wound.

Fortunately, most postoperative hemorrhages are easily controlled if they are discovered in time. Hemorrhages from constitutional causes—*hæmophilia* and jaundice—are quite different. *Hæmophilia* it is the surgeon's business to discover; jaundice he cannot overlook. Unhappily, it makes little difference in the capillary oozing of jaundice whether the hemorrhage is discovered early or not. In my only case of recovery the patient was left absolutely untouched.

In postoperative infections the physician has time to study his patient and to make his diagnosis. It has very seldom happened, in my experience, that serious sepsis has been overlooked. The signs of grave sepsis are conspicuous and unmistakable.

After all, the tendency on the part of the physician is toward a care that may be described as excessive. Little need be said to stimulate careful watch for unfavorable symptoms. Most surgeons would say, I think, that the attending physician sees all there is of real danger, and much more of unreal; but the patient's safety lies in this very watchfulness. The difference in risk run by the patient who convalesces under the surgeon's own eyes and the patient who convalesces under those of the attending physician is very narrow; and, excluding a few classes of operations, the convalescence is quite as satisfactory in one place as in the other. Gall-bladder operations, on the whole, demand more experience in the after-care than any others. The results of operations in which the patients are left to the care of the attending physician are eminently satisfactory.

The common experience in our profes-

sion, unless I am greatly mistaken, is for the surgeon to shift to the shoulders of the physician the responsibility of most surgical failures. I do not know how it is with the specialties; but, speaking for surgery as a whole, I am sure that the general practitioner has been put by the surgeon far too much upon the defensive. Surgery has been aggressive and brilliantly successful. Its rewards have been ample. Surgeons owe so much to the general practitioner that they should be generous, particularly in that form of generosity which assumes as far as possible the burdens of failure. But, speaking for the physician as I can, having been in general practice twelve years, he demands at the hands of the surgeon and specialists generally, not generosity as a condescension, but rather justice as a right. So I say that the surgeon should use extreme care lest in the glamour of his brilliant art the physician's rights become obscured, and when there is the least doubt as to the shouldering of responsibility the surgeon should be eager to assume the heavier burden.

If in this essay thus far I have, as experience suggests, devoted my time to matters in which the physician may well distrust his own judgment, I have not forgotten that there are many in which the physician should distrust still more the surgeon's judgment.

The physician, by long experience with the surgeon, "sizes him up"; he balances the good with the evil, the success with the failure; he forms a fair estimate of his skill as a diagnostician, as an operator; he is impressed by his radicalism or by his conservatism; he estimates his good qualities as well as his bad; he applies to the surgeon that common sense which is so conspicuous in himself. He is inclined, I think, like the surgeon, to become prejudiced by errors of first acquaintance. If in his first case the surgeon, upon a wrong diagnosis, operates unnecessarily; or if a patient dies after a trivial operation; or if she is burned, or a gauze is left in her abdomen—he must be a man of faithful and judicial temperament if he does not next time try another surgeon.

I freely admit my feelings of astonishment, when a friend and teacher, for whom I have the highest regard, and for whose surgery I have the greatest admiration, said to me, "I do not examine a patient who has a clear history of appendicitis. I tell him examination is of no use—I should not find anything. If I do feel a diseased appendix, I shall operate; and if I do not feel one, I

shall operate. The fact that I cannot feel a diseased appendix does not count against the history." I know this surgeon so well that I do not hesitate to say that he is one of the most brilliant and safest men in the world to whom to entrust a friend; but a stranger would feel that his neglect to examine the patient was inexcusable.

Should not the physician distrust the judgment of the surgeon who fails to make a physical examination? Is not such failure *prima facie* evidence of superficial investigation? How much will the surgeon know of contra-indications? How would he feel to lose a patient of a complication which thorough study would have shown to be probable?

A young girl, a stenographer, came to me last winter for an opinion as to her appendix and the wisdom of having it out. I went into the history very carefully, and examined persistently. I could find no reason for operating which would have satisfied me were the girl my own child. She came to see me from time to time all through the spring, and I was still undecided. Her case belonged to the group of neurasthenias in which such operations have a brief suggestive effect for good, and a late, letting-down—collapsing effect—for evil. After three or four examinations, and many talks (for I was especially anxious to do the right thing, as the patient was a wage-earner and unable to indulge in whims) she told me that she had consulted a surgeon who had advised operation the next morning. She told him that she had had a pain in her right side. As she stood before him without having removed a single garment, he put his fingers over the right iliac fossa, and said, "We must have it out to-morrow morning." I must say that I shared the girl's feeling of doubt and distrust, and that the surgeon's advice was absolutely indefensible. I may have gone too far the other way, but my conscience is clear.

In case of error in diagnosis and unnecessary operation, the physician does not always distrust the surgeon because he himself brings his own diagnosis to the surgeon, and the surgeon confirms it. Perhaps the most frequent error on the surgeon's part is in the diagnosis of gall-stones. I recall a few cases in which exploration has failed to show them after a pretty positive diagnosis. No one is exempt from this error. I recall a physician of Philadelphia who made in his own case the diagnosis, which was confirmed by one of the best surgeons there or elsewhere, and finally by

myself. At operation I found nothing but thick, dark, tenacious bile. The patient made a good and permanent recovery from what was probably a chronic cholecystitis.

I will not multiply the gall-bladder cases—I will merely say that perhaps once in fifty operations we find no gall-stones. The error in operating in such cases is not serious, for it leads either to some mild and remediable lesion in the gall-bladder, or to some disease even more serious than gall-stones. In one case I found not only gall-stones, but a cancerous stricture of the jejunum—an exceedingly rare disease. In this case we did a successful resection.

But I do not find the physician criticizing me severely, even when little if anything else is found to account for the symptoms. The failure to criticize is perhaps, as I say, because my diagnosis agrees with his. What if mine and his were frequently conflicting? I should not blame him for criticism, but I should, I fear, think him unjust, if, when doing my very best, I had made an error. And we surgeons—criticizing the physician who does not distrust his own judgment in surgical matters—are we just and impartial and, above all, charitable? Not all of us.

In this address I say that the physician must distrust his judgment in every breast tumor, and I repeat it. And this remark applies to all tumors, wherever situated; for if the surgeon learns, as I have, occasionally to distrust his own diagnosis of benignancy, how much more must the physician distrust his?

A physician, with whom my acquaintance had been of long standing, sent me his rector's wife, who had a large tumor in the right breast. I made a positive diagnosis of medullary cancer, and gave a very unfavorable prognosis. As my consultant preferred to perform the operation, I told him not to be content with any but the most radical one—removal of pectorals, dissection of axilla, and, if necessary, of the subclavian triangle. The tumor proved to be a simple fibroma, encapsulated, easily removable, absolutely safe; and yet, on my advice, the physician carried out the greatest operation for cancer. My opinion agreed with his, and he probably does not distrust me, but I distrust myself.

About the same time I removed, by extensive dissection, the right breast of an old lady, under a *sure* diagnosis of infiltrating and unfavorable cancer. The specimen showed an abscess in the depths of the breast, and no malignancy.

These are a few examples of error on the



part of the surgeon. Do they lead to distrust on the part of the physician? I think not when the surgeon has given the patient every care and attention of which he is capable.

The most frequent failures of surgical operations follow interference with functional disturbances, chiefly in women—disturbances manifested usually by abdominal pain. If there is ever reason to distrust surgical judgment, it is in the mechanical treatment of ills which have no pathological foundation. Perhaps I am not going too far in criticizing abdominal surgery when I say that more mistakes in diagnosis and in prognosis are committed in the diagnosis and treatment of abdominal pain than in any other condition. I wonder sometimes that the attending physician persists in his faith, when I recall the many miserable failures of such operations as nephrorrhaphy, oöphorectomy, and appendectomy—not to mention gastro-enterostomy, and operations for uterine displacements.

Many patients come to me with complaints which I am sure have no physical foundation. In most cases I advise against operation, though knowing well that the patient will sooner or later find some one willing to operate upon her. In some cases, after prolonged observation, I do operate. In a very small percentage I find—or imagine I find—an appendix perhaps thicker than normal, or larger or harder; perhaps a little angulated or constricted; but without any reasonable evidence of change sufficient to cause pain. If I find nothing else to account for the pain, my chagrin is not great, for I have removed a possible menace to the patient's health, and she seldom regrets such an operation. Moreover, the operation is of the most trifling danger. By the sacrifice of useful organs like the ovaries, however, the patient is rarely benefited: she lives to have renewed pain; to find herself perhaps worse than ever, and to suffer the bitter mortification of being unsexed. I see many cases of this kind, and the wrecking of useful lives by the early craze for sacrificing ovaries should serve as a warning against too fervid praise of new procedures. The physician's distrust should be the surgeon's distrust when new operations of magnitude are advocated as safe and successful. It takes a long time for the value of a new treatment to be accurately estimated: first reports must ever be distrusted; end results are not always convincing. The warmest friends of a new operation are sometimes its worst enemies.

Take the surgery of the stomach as a good example of the value of modern surgery. If the followers of the Mayos' brilliant work would copy their wise conservatism, the general experience with gastric surgery would be more encouraging. The trouble is that men rush their patients into surgery when there is no real gastric lesion, or one which faithful medical treatment would surely and safely relieve.

We surgeons do not always appreciate the weight of responsibility which the physician who sends us a patient feels toward the family of his patient. When he recommends an operation and suggests a surgeon, his sense of responsibility is by no means fulfilled. His professional pride is engaged, and when his patient dies, he cannot but share the chagrin. I recall my own feelings in the case of a friend whose only child I sent to another surgeon for operation on cleft palate. The morning after the operation the baby was found dead. No cause whatever for death was made out. I felt in this case a greater responsibility than I imagined could ever be felt by a man who recommends another.

The crying need to-day is fearless regard for the truth. It is a duty which the surgeon owes the physician to represent things as they are, in their good or in their evil, unclothed. How are we to judge in questions which concern life and health when the testimony is untrustworthy; and I regret to say that I believe much of it, for one reason or another, to be untrustworthy. Its untrustworthiness is inevitable so long as the witness is not put under cross-examination; for, as we all know, evidence is smooth and fair and favorable when it is given in response to the questions of direct examination. When a skilful cross-examiner takes the witness in hand, however, what a tangle of wreckage is made of the witness' statements! It makes little difference whether the witness is trying to tell the truth or not, the indirect examination will test every word and every sentence. The cross-examiner will, if himself honest and fair, bring out the exact truth in a form in which, if considered with the truths of the direct examination, will justify an impartial verdict.

When the physician is considering the possible weakness of his own judgment in, say, an old man with a prostate, he, having perhaps little experience with the modern operation of prostatectomy, reads up the published accounts of it. What will he find? Very few if any failures; many promises,

and invariable successes, and he will send his patient to the man whose writings impress him most deeply and most favorably.

I have practiced surgery, or have been a close observer of it, since the beginning of the modern art; and I have learned to distrust early reports of great operative successes. I do not mean to say that these reports are false, though I have no doubt that some are; but I do mean to say that the evidence has not stood the test of a severe, honest cross-examination.

And am I not right, gentlemen, in saying that reports of surgical procedures which differ so materially as one in which there is no mortality differs from another with 20 per cent. mortality—in saying that such records are incompatible? In the nature of things such a variation cannot be accounted for by differences of technique or experience. It is a difference in the use of words and in their meaning.

I have recently observed hospital reports in which general peritonitis varies in the results of treatment from 4 per cent. to 100 per cent. of deaths! Do methods account for the difference? Certainly not. It is, I repeat, a matter of classification and of the exact meaning of words.

One word more on this subject—one of the younger surgeons—between forty and forty-five—recently said to me, “You cannot expect a man to report his failures until he has ‘made good.’ Then he can do so without hurting his practice.” Does this opinion—can it—express the state of mind which prevails in the strenuous and so-called productive years of life? I trust that this gentleman did not mean what he said.

In considering the physician’s tendency to error in sizing up surgical cases, we must take into account matters which affect his judgment, and especially his bias; for we all have one either for or against surgical measures. And the dangerous bias is not always that which restrains him from surgery. It may attract him—like the candle the moth. We must, therefore, consider the unfavorable more carefully than the favorable side of surgery.

And what can I say of the gloomy, the black side of what I like best in my profession? Much, I regret to say. I see haste and carelessness in diagnosis. In indications for operation I see bias, one-sided considerations, false prognosis, a belittling of evil and a magnifying of good. In operation I see the grave contingencies of anæsthesia, of technique, of surgery generally. In after-treatment I see phlebitis, embolism,

abscess, burns, typhoid, pneumonia, and all kinds of diseases. In after-life I see disabilities, neurasthenia, hernia, adhesions, and the like.

But perhaps I do not need to enumerate the errors, disasters, disparagements of surgery. Doubtless you collectively have seen more of these things than I have. But are not they true? I am sure they are.

The strict impartiality which I am trying to maintain impels me to say, finally, in connection with this branch of my subject, that the successes of surgery amaze me to this day. I cannot cease to wonder at the incredible achievements of the modern art, especially when medicine and surgery go hand in hand, and when the physician recognizes early the need of the surgeon, and the surgeon responds swiftly and generously to the call of the physician. The more intimate and correlative the two great divisions of medicine, the more effective and brilliant will be the results of their interdependence. But the physician must see for himself that surgery says what it means and means what it says. He must be especially careful lest, carried away by the brilliancy of early reports, he be unduly disappointed by his own experience when he applies to surgery, disgusted perhaps by the false allurements of hasty and ill-considered results.

And yet I suppose that progress depends somewhat upon the favorable reports of biased and enthusiastic observers. I have often wondered what would have happened if the first administration of ether at the Massachusetts General Hospital had been fatal. Surgery would have been set back a hundred years. And if prostatectomies were reported as unfavorably as they ought to be what would be the future of that beneficent procedure? Not that there are two sides to the question of honesty. There can be but one. And yet it is said that the truth ought not to be told at all times. The natural impulse is to make public success, and conceal error, and progress is based upon too enthusiastic reports. But through imitation or experimentation, hundreds of followers of the leaders develop a procedure into what may be styled “the average man’s experience.” The operation, line of treatment, method gradually find their level, as both the bolder and the more conservative observers gain experience with it; and, finally, it becomes accepted by the profession generally at pretty nearly its real worth. The physician can then, for the first time, base his action upon demonstrated truth. He can now



pretty well estimate the value of early operation for appendicitis, and soon will, I hope, for gall-stones. He has ceased, and wisely, I believe, to call so frequently upon the surgeon in cases with gastric symptoms. He sends his old men for prostatectomy in fear and trembling, while he relies but half-heartedly upon mechanical art for the removal of cancer of the rectum and intestine. He has probably become unduly discouraged with brain surgery, while for that of the kidney (except nephrorrhaphy) his enthusiasm is justly unbounded. For surgery in general I am sure he cannot but feel the admiration and wonder which we who are working in it all the time feel.

And the surgeon, observing the physician, admits, first of all, his great dependence upon the physician for everything that comes to him of early reputation. His talents are first judged by his brother practitioners; and I know of none who, on the whole, judge so accurately as the contemporary. To be sure, early judgments are often cruel, as we all have seen them in the affairs of college life, when a student's career has been blasted perhaps by thoughtless acts uncharitably construed. But, as I say, with age comes charity in its broadest application; and if our acts as beginners are less leniently construed than as seniors, it is perhaps on the whole best that the correction be applied early enough to be effective.

The consulting surgeon is impressed daily by the work of the general practitioner. He observes, wonders, admires, and in many ways he sees the necessity for reforms in himself. While he cannot but see that there are some things to be desired in the general practitioner, the mote that he sees is in spite of the beam in his own eyes. I am brought into daily contact with the man on the firing line, the man behind the gun—the man in personal and intimate contact with the patient. He is human like ourselves; but his daily life is one that stimulates all that is good in him—and one thing in particular. The one special thing I see is charity. It makes no difference how selfish a man may be—how grasping, penurious—he is less selfish, less grasping, less penurious, in the profession of medicine than he would be in any other occupation. I do not know that I will except even theology. In medicine a man has the temptation and the legal right to demand money for his services; and, in spite of that temptation and right, he becomes, by the practice of his profession, charitable. In theology—the worst paid profession of all, often less remunerative

than that of a laborer, and much less so than that of my black choreman (to the shame of the public be it said)—in theology, I say, there is no temptation, and no legal right to any money return. It is charity in its purest form; it is charity not forced upon the individual, but calmly and unselfishly embraced. It is a life of rigor and devotion into which one enters without any stimulation beyond that of a righteous spirit. And in this sense theology is the purest, most unselfish, most admirable embodiment of charity, human and divine. Medical charity, in many cases it is true, embraced with unselfish devotion without the expectation or perhaps the possibility of reward in the rank and file, is one of unavoidable necessity on the part of the physician. The habit of responding to all calls, regardless of money, becomes ingrained. The first thought becomes thought for the patient; the last, for self.

The surgeon sees, in the life of the general practitioner, one devoted to good works. He sees labors so absorbing and relentless that his own seem trifling. And, furthermore, he sees work done for the love of it, night and day. He sees that the physician is the most beloved man in the community. But, at the same time, he finds him so unbusinesslike, so wrapped up in his work, that he is making no provision for his old age.

At times when I have seen patients in consultation I am ashamed to see the difference between what I do for my fee and what the attending physician does for his; and I wonder that he does not distrust me rather than himself. The physician, poorly paid, after years of devotion to a family, sees the surgeon take for an hour's work more money than he will get for the attendance of a lifetime!

In many cases the surgeon, like the physician, acts most charitably; but in many the surgeon is a perfectly unnecessary luxury, and the physician has little chance of ever doing the simplest operation if the consulting surgeon is willing to operate for small fees.

The experienced surgeon is for the solution of problems of great difficulty and the performance of operations of great responsibility. The surgeon of great experience is usually glad to respond—regardless of the fee—when there is an urgent call for that experience, when perhaps he would not respond for a large fee in a trivial case, and one which the attending physician was perfectly competent to handle.

What is needed is as intimate a relationship between medicine and surgery as can possibly be brought about—a generous and friendly intimacy. The responsibilities are large enough to be equally shared, and, I may add, equally paid for. I recall well a case of suspected tumor of the spinal cord in which the surgeon's fee was not criticised in the least, when the neurologist's—which was half the size—was severely condemned. And yet it was the neurologist who made the diagnosis and advised the operation. But I must say that the failure to put a high estimate upon opinion (diagnosis and prognosis), as well as upon the legitimate working out of that opinion (operation) is our own fault.

We see, then, for this reason or some other equally plausible, physicians taking responsibilities in diagnosis and prognosis which surgeons ought to assume; we see them bearing responsibilities of acute diseases, which are apparently much greater, but which are really less so, for they are peculiarly fitted for such. The time has come, however, when the surgeon must yield to the physician in matters that are peculiarly medical; and, too, the physicians must call upon the surgeon—and that at the earliest possible moment—in matters that are purely surgical. In the suspected borderland case, both medical and surgical practitioner must work in the closest and most cordial intimacy.

## ORATION ON MEDICINE.\*

### Joint Affections Caused by Infectious Diseases.

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The high honor that you have conferred on me, by making me your orator on medicine, is very fully appreciated, and I shall endeavor to present an interesting topic for your consideration. The fact that no very precise directions were given as to the subject upon which I should speak leaves me free to choose any topic that may be of interest to the general profession, not losing sight of the fact that it would be impossible

to cover all of the advances in medicine during recent times, or to invade the realms of the specialist.

I have selected for discussion "Joint Affections Caused by Infectious Diseases." This has been done advisedly, for, while the orthopedic surgeon may be fairly informed regarding these diseases, the general practitioner is ignorant of the cause and effect of infectious arthritis; and, further, the literature is by no means full or definite; in fact, a proper classification has only recently been attempted. As the published accounts are so very meagre, I shall have to depend largely on personal observations of cases seen in private and consulting practice, and in the wards of the Paterson General Hospital, the Children's Hospital and the House of the Good Samaritan in Boston.

A number of reasons might be mentioned to account for the lack of information regarding infectious arthritis, but I shall mention only two: First, the custom of classifying all cases of arthritis under the head of rheumatism; and, second, the attempt to group all these joint affections under the name of Still's disease, which, I shall show later on, in no wise explains all the conditions of all cases of infectious arthritis.

As to the use of the term rheumatism, which, for instance, is used to define joint complications occurring in cases of scarlatina and gonorrhœa, this does not cover the contention, for neither of them is rheumatism, but each is an infectious arthritis, due to the special virus that has in a general way poisoned the patient.

Regarding the term "Still's disease," we may readily see, after reading his original article, that it accounts for only a few of the arthritic affections in children which we meet with and understand to-day. Still's first paper was read November 10th, 1896, and was published in the *Medico-Chirurgical Transactions* (London, 1897), under the title, "On a Form of Chronic Joint Diseases in Children."

The following is his definition: "The occasional occurrence in children of a disease closely resembling the rheumatoid arthritis of adults has been recognized for several years. The identity of the disease seen in children with that in adults has never, so far as I am aware, been called in question. The purpose of the present paper is to show that, although the disease known as rheumatoid arthritis in adults does undoubtedly occur in children, the disease which has most commonly been called rheumatoid arthritis in children differs both in clinical

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aspects and in its morbid anatomy from the rheumatoid arthritis of adults. It presents in fact such a marked difference as to suggest that it has a distinct pathology. The cases hitherto grouped together as rheumatoid arthritis in children, including therefore, more than one disease, and it will be shown that there are at least three distinct affections, which have thus been included under one head—rheumatoid arthritis.”

He defines his disease “as a chronic, progressive enlargement of joints, associated with general enlargement of glands and the spleen.” From this statement we gather that Still did not discover a new and separate disease, nor fully appreciate the discovery he did make, yet he is entitled to the great honor of being a forerunner in the work that has been done during the past six years, in separating and classifying the various joint affections in children, due to specific systemic infections.

Garrod in his masterful article on arthritis deformans (20th Century Practice, Vol. II.) sums up the difficulties of accurately classifying the class of cases now under discussion. He says: “The defects and shortcomings of the system of classification of diseases, which is of necessity adopted, in default of a better, in the textbooks of medicine of the present day, is nowhere more manifest than in connection with those diseases in which joint affections play a conspicuous part. It is customary to group together, as diseases of the joints, a series of systematic maladies which have little in common with each other beyond the tendency to involve the articular structure. It is true that the diseases so included present superficial resemblances, and have indeed been at all clearly differentiated only in comparatively recent time.”

This was written in 1895, and we hope now to clear away all ambiguity and arrive at a clear understanding. This may only be done by attention to recent studies and by obliterating the name of rheumatism from the kind of joint affections of which I am now speaking. Thus we can easily ascertain that our modern estimate of infectious joint diseases is becoming clear and very easy of appreciation, when we accept the facts that nearly all specific systematic infections may be a cause of arthritis.

Perhaps a quotation from Rotch (Fifth Edition of his Pediatrics) will serve as a sort of resumé of the general understanding of the modern estimate of these joint affections. He says: “The great majority of cases in which the joints are affected in chil-

dren is now known to arise from infection. This infection is due to the presence in the body of one of the specific organisms, and the affection of the joints in most cases occurs in the course of the general specific disease. The primary focus of the disease may be in any part of the body, as the tonsil, or the ear. The arthritis may be due to the presence of the specific organism in the joints, or to the action of the toxins alone. In the former case the local process is more severe. It is thus seen that under the term “infectious arthritis” should be included a very large number of diseases. The character of the joint lesions depends upon the special organism present, and while, in certain instances, such as infection from the tubercle bacilli and in syphilis, the anatomical conditions can often be recognized, yet in most cases the diagnosis is made by the occurrence of the arthritis in the course of one of the specific infections, such as rheumatic fever, scarlet fever and typhoid fever.

Infectious arthritis may be the result of any of the infections or pus-producing organisms. The severity of the attack depends not only on the special organism, but upon its virulence, whether it is actually present in the joint, and upon the idiosyncrasy of the individual child. Such organisms as pneumococcus, streptococcus, staphylococcus, influenza bacillus, bacillus dysenteræ, and many others, such as those connected with erysipelas, glanders, spinal meningitis, may produce arthritis.”

To simplify and shorten the length of this paper I shall exclude from consideration joint affections caused by tuberculous disease, syphilis and acute rheumatic fever and the various forms of the so-called chronic rheumatoid cases, as the pathology, symptoms and course are fairly well understood by the profession. This will leave me free to confine my attention to the less understood cases of infectious arthritis.

As stated above, the literature is very scant, but I append a list of all the instructive articles that have been published during the past few years, and they are comprehensive and all well worth the reading: Osler's Modern Medicine, Vol. II., Rotch's Pediatrics, Thorndike's Orthopædic Surgery, Furrer, *Archives of Pediatrics*, 1907, Goldthwaite; *Boston Medical and Surgical Journal*, April, 1907.

ETIOLOGY. The cause of all the diseases mentioned below is a specific infection in one form or another. This may be a simple or a mixed infection. It may begin in the

joints themselves, or follow an infection in any other part of the body. The arthritis so caused may be acute or chronic, and may be atrophic or hypertrophic. The course, if not acute, is a long, chronic invalidism. The arthritic affection may be benefited by diet or medicine; or may require the attention of an orthopædic surgeon, or medicine, diet and surgery may have to be combined.

**PATHOLOGY.** In cases of infection by the pneumococcus, the streptococcus, the gonococcus or the bacillus of typhoid fever the specific organism is found in the joints. In coarse pus cases abscesses are present in and around the joint, or in the bone or adjacent muscles. There is a local inflammation, the joint is swollen and the joint capsule may be thickened. Cases resulting in atrophy show wasting of the joint, the articular cartilage and the bones also show a wasting process. There may be an affection of the bones themselves, which may or may not be followed by ankylosis. Many of the cases show the formation of new bone. In fact, the joints present the varying grade of inflammation in all of their phases.

The onset of the disease may be ushered in by chilliness or by a pronounced chill. This may occur before or after the existence of the infection in another part of the body. There is redness, pain and swelling of the joint, besides lack of motility. The course of the disease varies greatly and depends largely on the virulence of the infection and the effect of medication.

We shall now consider the more prominent forms of infectious arthritis.

**PNEUMOCOCCUS ARTHRITIS.** It is probable that the largest proportion of joint affections, in children, is caused by an infection due to the presence in the system of the diplococcus of Fraenkel. An idea of its frequency may be formed when I tell you that during the past five years the writer has seen and studied sixteen cases in private and hospital practice in Paterson, N. J., and twelve in the wards of the Children's Hospital and the House of the Good Samaritan, at Boston, Mass. I also refer you to the reports of twenty-six cases seen by Farron, and nineteen by Goldthwaite. In these seventy-three cases one or more joints were infected and the primary site of the infection varied very much, depending largely on the virulence of the poison and the particular idiosyncrasy of the child.

In some cases the primary site of the invasion was the tonsils, or the lungs, or the middle ear. A case presented an arthritis before other parts of the system were in-

vaded. It is well to remember that many cases having an exudate on the tonsils are due to a pure pneumococcus infection, and are often mistaken for diphtheria. Of course a bacteriological study reveals the true cause. It is also of interest to note that a pneumococcus tonsillitis may produce almost all the sequelæ found in diphtheria.

One remarkable fact worthy of note is that these cases profoundly affect the child, the temperature rising to  $106^{\circ}$ , and the patient becoming comatose. There is also a series of infections in other parts of the body, besides arthritis; there is nephritis, endocarditis, meningitis, or pneumonia.

Many of the cases seen by the writer were due to a mixed infection of the pneumococcus and the streptococcus. An interesting case of this sort may be briefly outlined: A child five years old had a pronounced chill and a temperature of  $106^{\circ}$ . There was an exudate covering the tonsils, the palate and the nasal and buccal mucous membrane. This exudate was due to a pure pneumococcus infection. The constitutional symptoms were very profound and coma existed for days. The joints soon became affected. On the sixth day the membrane contained streptococci. Double otitis media was present, then nephritis with suppression, then double pneumonia followed. Soon abscess of the brain with meningitis set in and the patient died.

**EPIDEMIC INFLUENZA.** This is often followed by arthritis and other infections similar to that of pneumococcus infection.

**SCARLATINA.** It is probable that the organism causing this disease is similar to that producing erysipelas and acute rheumatism, for, besides the joint complications, endocarditis is a frequent concomitant.

**MENINGITIS.** This is a frequent cause of arthritis. I recently saw a case in which the joints were affected before any meningeal symptoms were present. A lumbar puncture revealed the presence of the lanceolatus.

**STREPTOCOCCUS INFECTIONS.** These are very common causes of arthritis, and may result in a coarse condition of abscess around the joints or of a local fine infection. A common, but often unrecognized, cause is a streptococcic tonsillitis. Many of these tonsillar cases present similar sequelæ to those of diphtheria, such as paralysis of accommodation, paralysis of the soft palate, a multiple of neuritis and arthritis.

A case seen two years ago may be of interest: A man thirty-two years old had a streptococcic tonsillitis. This was followed



by arthritis of the ankles, wrists, knees and fingers. A general cervical ademitis and double otitis media succeeded this. Then there was pleurisy, pneumonia, endocarditis and general peritonitis. Nephritis with suppression closed the scene.

**GONORRHOEA.** Many physicians have treated arthritis due to this cause. This infection may be localized in the urethra or the joints, but a great number are seriously affected in other organs. I recall a case of a man twenty-four years old who had gonorrhoeal arthritis affecting both knee and ankle joints. This was followed by endocarditis and pneumonia.

**HÆMOPHILIA.** It is probable that this is an infection. Sixteen cases seen by the writer had arthritis, but all recovered from this condition.

**SCORBUTUS.** Scurvy in children is always accompanied by arthritis. This disease is caused by improper food, such as sterilized milk and some of the proprietary foods, or by intestinal intoxications due to other factors. All the cases seen by the writer, twenty-seven in number, have gotten well when given proper food and medication. The most satisfactory plan is to give the child buttermilk, or milk inoculated with the lactic acid ferment. This diet, with fruit juices and citrate of potash, generally effects a cure.

**INTESTINAL INTOXICATIONS.** Next to the pneumonic infection the larger number of cases of infectious arthritis is due to some form of intestinal toxæmia. This may be caused by a simple or by an amebic dysentery, or by a prolonged enteritis. This group of cases is particularly prone to chronicity, and unless the change of diet and medication effect a cure the patient becomes the subject of orthopædic surgery.

It is hardly necessary for me to mention the various forms of arthritis and necrosis that follow typhoid fever.

In closing this paper I may say that if I have interested the general practitioner sufficiently to warrant his study of this class of arthritic affections, and to stimulate him to outline the proper treatment, my labor shall not go for naught.

My thanks are due to Dr. Frank R. Sandt, pathologist to the Paterson General Hospital, for bacteriological work, and to Dr. Augustus Thorndike, of Boston, for the assistance and kindly interest in the cases under his care at the Children's Hospital, and the House of the Good Samaritan in Boston.

## A REVIEW OF THE PROGRESS OF MODERN PSYCHIATRY.\*

By Henry A. Cotton, M. D.,

*Medical Director of the New Jersey State Hospital at Trenton, N. J.*

Although the title of this communication may suggest topics of interest to the psychiatrist alone, still I hope to present to you the broader features of psychiatry—those which should interest the general practitioner as well as the specialist. In no branch of medicine is the need of coöperation between the specialist and the general practitioner so necessary as in this.

For many years psychiatry did not share in the general progress and advancement of other branches of medical science. It appeared wofully in the rear, and until recently it seemed destined to remain in this category. No new discoveries, either in treatment or prophylaxis, were made and no one apparently looked for any. The general practitioner received but little aid from the asylum physicians, and the latter were regarded in a somewhat pathetic light, and, to a large extent, this attitude seemed justified. But the asylum physicians were not altogether to be blamed for this state of affairs. Many factors contributed to make their position an unenviable one. Surrounded as they were by patients afflicted with a hopeless malady, loaded down with executive and administrative duties, usually isolated from medical centers, and without the leaders so necessary to stimulate and guide them, they naturally followed the path that offered the least resistance, with the usual results.

Hardly a hospital boasted of a laboratory until a few years ago and no attempt was made to do research work of a scientific nature. In this respect we were far behind European hospitals, especially those in Germany. We were content to accept the dogmatism of predecessors, to be content with the existing classification and terminology. One of the greatest factors responsible for this lethargic condition in psychiatry, was the lack of adequate psychiatric instruction in the curriculums of our medical schools. As a result of this, a medical man had little or no training in this branch when he began to practice his profession, and he had little opportunity afterwards to acquire any knowledge of the subject. No stimulus was

\*Read at the meeting of the Tri-County Medical Society, Salem, N. J., May 26th, 1908.

given to the hospital physician to forge ahead, and for a long time no leaders appeared to guide those who were inclined to take up scientific work. Contrast this condition with that of psychiatry in Germany. There it was given as much a place in the curriculum of a medical school as other branches, and students were compelled to pass a rigid examination in this subject before they obtained their degrees. Psychiatric clinics were established in practically all the universities, and numerous workers in this branch were engaged in research work under skilled professors.

However, as we review the last ten or twelve years, we can see a gradual awakening in this country, although some years behind our German colleagues, and many years behind other branches of medicine, the progress has been none the less marked. We owe much to the University of Heidelberg for the stimulus, for there Kraepelin achieved the fame of breaking away from established traditions in clinical psychiatry, and Nissl perfected his methods for studying the histopathology of the cortex, and both were to mark distinct epochs in the history of psychiatry. Kraepelin, however, by his bold secession laid the foundation for modern psychiatry, and by his methods opened up new fields for research work. Too much stress cannot be laid upon his influence, both abroad and in this country.

The first editions of his textbooks were much the same as others of that period. It was plain, however, that Kraepelin was far from being satisfied with the existing status of clinical psychiatry. He was engaged in investigations which resulted in the departure from existing traditions and previously expressed opinions, in the fifth edition of his textbook. His work is based upon the broader consideration of the complete evolution in the life of the patient. He believed that it was time to establish disease entities, based upon the cause, course and outcome of the psychosis. According to him these factors should be paramount in classifying mental diseases. As has been expressed by others, he sought to take a longitudinal view of the cases rather than a cross-section one. In older textbooks, and many recent ones, the temporary features of the disease absorbed all the attention, to the neglect of factors that would give any indication of the prognosis and etiology.

Other systems based upon psychological features alone were a failure from a medical point of view, and the fact that Kraepelin made the medical interests of the case

paramount, distinguishes his work from the work of other leaders. Prominent among his opponents was Wernicke, who had built up a system of psychiatry, characterized by exceptionally good clinical observations, in which he attempted to harmonize psychological and neurological data. To Wernicke we are indebted for much of our knowledge of aphasia and cerebral localization. He was opposed to Kraepelin's sweeping innovation, as he thought it was premature, that too little was known of the various functions of the brain, to establish such broad clinical entities. His work commands our attention, because of the minute and accurate analysis of cases, and it is to be regretted that his untimely death prevented the further elucidation and demonstration of his principles. No one will affirm that Kraepelin's classification is complete, but all must admit that it is far superior to those which preceded it, and as a working basis is admirably suited to the needs of psychiatry to-day.

I will not tax you with a discussion of his ideas except to mention two of his masterpieces. As you know, most of the psychoses were placed under the general classes of mania and melancholia, modified by various characteristics in etiology and symptomatology. Fundamentally, these two classes were considered dissimilar, and the antithesis of each other. They were not established upon any definite psychological basis except perhaps excitement and depression. And here is where Kraepelin's numerous psychological studies were of practical value. Combined with this knowledge was that derived from the study of the course of such cases. It was evident to him that he was not dealing with entirely different disease processes, but rather different phases and manifestations of the same process. He assembled these symptom complexes under the general term "Manic-Depressive Insanity," and, unfortunately, no adequate English term has been found to represent it. If we adapt the English equivalents for this term the true meaning is confused with the old nomenclature. In bringing all these varied types into one class, in which the characteristic feature is recovery, Kraepelin cleared the field of much confusion and performed a lasting service to clinicians.

The other master stroke of Kraepelin was the creation of dementia præcox. Although this term was used before to designate a limited class of cases, to him belongs the credit of establishing this entity. Here



again symptomatology, together with termination, has been the basis of his classification. A large number of deteriorating psychoses were considered under various diagnoses and believed to be quite dissimilar processes. The term may be too broad, and it is possible that too many conditions have been included in it. It has been severely criticized, especially by the English, but in quibbling over the name many lose sight of the principle. It is evident that the principle is of more value to us than the name. At any rate, the term now brings up a definite picture to those familiar with his classification. It means that we can detect symptoms in acute cases that will establish the diagnosis, that will give us information upon which to prognosticate the outcome of the disease, long before actual dementia is present. It is of very little value for us to be able to diagnose deteriorating psychoses, only when in the last stages of the disease. For then the damage is done, and is beyond reparation; so our diagnoses, to have any practical value, must be made at a time when there is hope of doing something for the case, not when it comes to us in the final stages.

One cannot speak of the influence of Kraepelin upon psychiatry in this country, or the general awakening that has taken place in this new science, without mentioning Adolf Meyer. His name stands out prominently among the leaders in this branch of medicine. He clearly saw the advantages of Kraepelin's teachings and adopted them as a working basis for his investigations. If one glances over the centers of psychiatric activity in this country, Meyer's influence and teachings are clearly discernible. At first this awakening was noticed in the state hospitals, and for a long time it was confined mainly to them, but the influence began to spread to the universities, and in 1906 we note the establishment of a psychiatric clinic at the University of Michigan, due largely to the efforts of the late Dr. J. J. Herdman. This was the first clinic of this kind to be established in connection with a university for the purpose of giving instruction in this branch to medical students, and has been ably directed by Dr. A. M. Barrett. In Albany, Dr. M. J. Mosher had established psychiatric wards in the general hospital for teaching purposes. Aside from this no university had its own facilities for this instruction, and it must be admitted that in no branch of medicine are practical clinical demonstrations of more importance. The

usual course in psychiatry consisted in a few didactic lectures, and one or two visits to an asylum where the students evinced more interest in the humorous aspect of the cases than in the actual diseases shown them. At the present time other universities are showing an active interest in psychiatric clinics and psychopathic hospitals.

New York is engaged at present in erecting such a clinic, to be devoted to the scientific work in the State hospitals, and will be available for instruction of medical students.

We have seen, then, that a revival of interest in this infant branch of medicine has taken place. In many hospitals valuable research in both clinical and anatomical fields is being carried on by enthusiastic workers. What, then, has been the result so far of this increase in activity? Has anything of practical value been brought forth? Have the insane been benefited by such investigations? These are questions which naturally arise when one reviews the increased interest taken in psychiatry to-day, and I think they can all be answered in the affirmative, although it is too early to expect great achievements. There are many who are wont to affirm that nothing has been accomplished; that the psychiatrist to-day is no further advanced than those of a quarter of a century ago. But their arguments are based largely upon a lack of knowledge of the new methods, and a very narrow view of the whole situation. The very complex nature of mental diseases makes progress exceedingly slow, but if *something* is being accomplished, and if a large number of well trained men are taking an interest in the subject and endeavoring to solve the difficult problems by which they are confronted, then we can surely say that we are progressing. Hand in hand with awakened scientific interest has come a marked improvement in the care and treatment of the insane. Restraint and other ancient methods resorted to through fear bred of ignorance of the true nature of the disease, has given way to more modern ideas in treatment.

Acutely excited cases are treated by continuous warm baths and packs. In fact, the general effect of an "acute" hospital should not differ much from that of a general hospital, except for locked doors. Well-trained nurses are now in charge of wards, and every hospital of importance has its training school for nurses. Many other improvements in the care and treatment of the insane could be mentioned, but these just mentioned certainly show that the in-

sane have been benefited by modern methods.

It is folly to base any comparison of the old and new régime upon the number of cures effected. Statistics of recoveries are most misleading, are dependent too much upon the knowledge and personality of those compiling them, and often fail to express the true conditions, so that the basis of cures is not a fair one for comparison. No one looks for any great cures, either in general medicine or psychiatry, but in the latter, as in the former, progress is marked by methods of prophylaxis, and this necessarily demands that we should have an accurate knowledge of the etiology before we can take means to prevent the occurrence of mental disorders.

A great deal of work has been done in getting at correct diagnoses, and much work is still to be done along these lines before we can obtain an accurate knowledge of this subject. It is useless to attempt to treat diseases of which we know little or nothing. The experience and knowledge gained in studying our cases more minutely, for the purpose of arriving at a diagnosis, has placed us in a position to talk intelligently about etiology.

The knowledge that a history of previous syphilis was present in a large majority of cases of general paralysis or paresis, was the result of this minute study of cases. Further investigation revealed the fact that this was not a mere coincidence, but must be regarded as having some bearing on the causation of this disease, and it is now recognized that syphilis is the principal if not the only cause of general paralysis. As these cases number about one-sixth of the commitment to our hospitals, the value of this knowledge of etiology is of the utmost importance, and the application of this knowledge would tend to lessen the number of such cases. According to Kraepelin, those affected with syphilis should forever abstain from alcohol, as this is one of the most potent factors in producing general paralysis in those infected with syphilis.

Alcoholic insanity is now a recognized disease entity, and constitutes from fifteen to twenty-five per cent. of the male admissions to our hospitals, besides being an indirect factor in producing numerous other psychoses. Here is where much good can be done by the general practitioner, and I have no doubt but that much good is being done by combating the influence of alcohol. Recently the country at large has awakened to the fact of the harmful influence of alco-

hol, and we see localities in every section prohibiting the use and sale of alcohol. No work can be more heartily commended than this, and no one can wield more influence than the general practitioner. Hence we see that in two instances if prophylactic measures were consistently employed, much of the preventable forms of insanity could be avoided; but the problem of prophylaxis in these conditions is very complex and associated with the question of personal liberty. Hence very little attention is paid to our warnings.

Recently much valuable work has been done in relation to dementia præcox. The pupils of Kraepelin have gone far beyond him in their investigations. Kraepelin was content to assign to autointoxication the rôle of causative agent in producing this condition, but we know little or nothing of the relation of autointoxication to mental diseases, and recent investigations in physiological chemistry seem to throw a great deal of doubt on this doctrine. It is merely throwing a cloak over ignorance to assign such importance to this obscure agent. It is much better to admit that we are ignorant of the causes rather than adopt the other course without any foundation other than guesswork. But his pupils have carried their investigations further, both in the realms of psychology and etiology of dementia præcox.

Jung<sup>1</sup>, by his psychological analyses, has fairly well demonstrated the relation of this process to hysteria. Meyer<sup>2</sup> has recently published some fundamental facts in relation to the etiology and outlined measures that should be employed in the prevention. Jelliffe<sup>3</sup> also has contributed valuable suggestions in a recent article dealing with pedagogic prophylaxis in the early stages of dementia præcox.

The fatalistic attitude assumed by physicians and laymen toward many forms of mental disorders cannot be too strongly condemned. Here has been one reason why we have failed in reducing the increasing ratio of insanity. If we are content to believe

<sup>1</sup>G. Jung, "Über die Psychologie der Dementia Præcox," 1907.

<sup>2</sup>Adolf Meyer, "Fundamental Conceptions of Dementia Præcox," British Medical Journal, September 29, 1906.

<sup>3</sup>Smith Ely Jelliffe, "The Signs of Pre-Dementia Præcox; Their Significance and Pedagogic Prophylaxis," American Journal of the Medical Sciences, August, 1907.

"Clinical Psychiatry," by A. R. Diefendorf. Translation of Kraepelin, "Clinical Psychiatry." Appleton Company.



that the majority of those mentally affected were doomed to their fate from the time of their birth, a view that is shared by many, then we cannot look for progress. Such opinions are based usually upon a very poor understanding of heredity and constitutional endowment. That many of the cases which constitute the permanent residents of our hospitals to-day could have been saved from their fate, in the light of recent investigations, seems to be probable.

From the viewpoint of the asylum physicians these are hopeless cases and, to some extent, they are correct, but much has been learned from these cases, even in their demented condition, that forms the basis of the present attitude towards means for preventing them. By studying the life history of these usually neglected cases and analyzing their symptoms, apparently so meaningless, much valuable data has been secured which throws considerable light upon the factors prominent in producing them. But the hospital physician stands in a peculiar and unfavorable relation to these patients, in the fact that such cases usually come under our observation in the end stages of their disease, and no hope of recovery can be entertained. It is of the utmost importance, then, that the general practitioner should have some knowledge of the early symptoms in these cases, of such importance in pointing to the outcome and means for preventing the progress of deterioration.

I shall only be able to outline, in general, the points that have been so ably brought out by Meyer and others. Meyer expressed a great deal when he termed these deteriorating psychoses "Habit Psychoses," for it has been shown that habits formed at an early period in the person's life play a very important rôle later on in the development of the psychosis. Especially at the age of puberty are the effects of the establishment of incorrect habits so disastrous. Here is the critical time in the life history of every one, and every effort should be made in correcting bad habits, or preventing them at this time, as later, through a lack of adjustment to reactions of everyday life, they may result in serious deviations from the normal, and a continuation of such constant attempts at adjustment may lead to irreparable damage by overtaxing this mechanism. It may be an overtaxing of the mental capacity that results so disastrously to the person, or a similar effect is accomplished when, through compulsion on the part of the parents, a child is driven into the very work and environment most distasteful to

them. If those responsible were acquainted with the symptoms shown in the child, these tendencies to mental obliquity could be counteracted. Instead of this we too often see their path strewn with difficulties that only hasten the progress of the process and result in an incurable affection.

Especially is this true of hysterical cases, and in the proper treatment and subsequent care of such types which show an abnormal reaction, it is of the utmost importance, if we wish to avoid subsequent grave mental affections, to be able to place them in the proper environment. No one is in a better position to give this much-needed advice than the family physician, so that it is very necessary that a much closer relation should exist between the general practitioner and psychiatrist. But we can look for more coöperation between the two in the future, and it has been my object to acquaint you with the facts which, perhaps, to many are very familiar, and if I have succeeded in arousing your interest in these problems, I shall feel that I have accomplished my purpose. And while we can, as yet, point to only a few achievements in psychiatry, still it augurs well for the future that so many are interested in such problems, and where diligent work is being carried on by a large number of workers, we may yet reach the coveted goal in solving some of the difficult problems assigned us.

## Reports of County Societies.

### MERCER COUNTY.

#### Edgar L. West, M. D., Reporter.

The regular monthly meeting of the Mercer County Medical Society was held in its rooms Tuesday evening, May 12th. It being the regular meeting for the annual election of officers, the following were elected for the ensuing year: President, Dr. James J. McGuire; Vice-President, Dr. Charles H. Mitchell; Secretary, Dr. E. L. West; Treasurer, Dr. Ira M. Shepherd; Reporter, Dr. C. J. Craythorn. Delegates to the State Society were appointed as follows: Dr. William S. Labor, Dr. Horace G. Norton and Dr. C. J. Craythorn.

The meeting place of the Society has been again changed to the Council chamber in the City Hall.

### WARREN COUNTY.

#### J. H. Griffith, M. D., Reporter.

The eighty-third annual meeting of the Warren County Medical Society was held at the Warren House, Belvidere, N. J., Tuesday, May 26, 1908, too late for the "thirty days" limit, as per request of the State By-Laws, to furnish the report within the prescribed time.

President Thomas S. Dedrick presided. The

attendance was small—twenty-five members on roll, with only fifteen present. A sad comment on the present membership, compared with the said Society of fifty years ago, when there was generally a full attendance. Yet we should not complain, for possibly what we lost in quantity we made up in quality.

We expected three guests, including our worthy Councillor, Dr. Thomas Harvey, of Orange; but only two were present. Dr. Harvey gave us an intellectual treat—a lecture on "Ectopic Gestation and Its Management," which was highly commended and was of great benefit to the members. The doctor promised your Reporter a synopsis of the lecture for the JOURNAL, but up to date it has not materialized for said purpose.

Dr. Samuel B. English, superintendent of the State Sanatorium for Tuberculous Disease, at Glen Gardner, N. J., presented a paper on "Septic Tank Sewage Disposal," which is herewith forwarded to the JOURNAL.

Dr. English is a young man of commanding appearance, and impresses the hearer with his honesty of purpose, clearness of mind, and as a man of superior knowledge and wonderful capacity for work. The State of New Jersey, through its Sanatorium Directors, made no mistake in selecting him as the Superintendent of of this necessary and valuable institution, situated among the hills of northern New Jersey, on one of the most acceptable locations in the State.

Dr. E. N. Brasefield, of Phillipsburg, N. J., read a most unique and praiseworthy paper on "Diagnosis and Treatment of Incipient Spinal Curvature," which elicited much favorable comment. The doctor has not as yet placed this valuable paper in the hands of your Reporter. Two other members of our Society and also Mr. William C. Smallwood, of Newark, N. J., with their subjects named on the program, failed to appear in person or by proxy.

Dr. J. M. Reese, of Phillipsburg, N. J., took advantage of the opportunity to impress upon the minds of the members of the Society the necessity of loyalty to the profession and to one another. Especially was he forceful and even severe on the *society and lodge contract system* as practiced by many physicians in our county and State, largely in towns, cities and great labor centers. He advised us to follow the teachings of that wonderful man and genius, Dr. J. N. McCormack, of Kentucky, whose reputation in advancing medical science and practice is world-wide. I feel confident that a better condition will prevail among medical men when the more mercenary and commercial practices are abandoned. I also feel satisfied that the majority of our members are endeavoring to conform to the spirit and letter of our county and State medical laws. The Society tendered a vote of thanks to Drs. Harvey, English and Brasefield for their able and comprehensive addresses.

The following were elected as officers for the ensuing year: President, Dr. E. H. Moore, of Asbury; Vice-President, Dr. H. B. Bossard, Harmony; Secretary, Dr. William J. Burd, Belvidere; Treasurer, Dr. G. W. Cummins, Belvidere; Censors, Drs. C. M. Williams and F. J. LaRiew, of Washington, and Dr. W. C. Allen, of Blairstown; Reporter, Dr. J. H. Griffith, Phillipsburg; permanent Delegates, Dr. G. W. Cummins and J. M. Reese; annual Delegates, Drs. Thomas S. Dedrick and C. B. Smith, Washington; Delegate to Sussex County Medical Society, Dr. O. Carhart, of Blairstown.

The Society is trying to have more than one meeting during the year, and I have great faith that we will succeed—Selah.

There have been no great epidemics in Warren County during the past year. A few towns have suffered, to a limited extent, from typhoid fever—especially along the Delaware river, the water of which is said by certain experts to be the cause. Other diseases have been of a sporadic character and limited. Our county, as usual, shows about the lowest death rate of any in the State, as per last report of State Board of Health. I also send you death notice of Dr. Swartsweller, once a member of our Society. He died June 8, 1908, and was buried at Belvidere, N. J., June 12, 1908.

## INTERNATIONAL CONGRESS ON TUBERCULOSIS.

President Roosevelt has accepted the presidency of the International Congress on Tuberculosis. His letter to Dr. Lawrence F. Flick, chairman of the Committee of Arrangements for the Congress, follows:

"THE WHITE HOUSE,  
"WASHINGTON, MAY 12, 1908.

SIR: It is with great pleasure that I accept the presidency of the International Congress on Tuberculosis, which is to meet in this city on September 21, 1908, and extend its session to October 12, 1908. Official duties, however, may prevent my presiding at the initial meeting of the Congress, in which case I shall deputize Secretary Cortelyou.

"The importance of the crusade against tuberculosis, in the interest of which this Congress convenes, cannot be overestimated when it is realized that tuberculosis costs our country two hundred thousand lives a year, and the entire world a million lives a year, besides constituting a most serious handicap to material progress, prosperity and happiness, and being an enormous expense to society, most often in those walks of life where the burden is least bearable.

"Science has demonstrated that this disease can be stamped out, but the rapidity and completeness with which this can be accomplished depend upon the promptness with which the new doctrines about tuberculosis can be inculcated into the minds of the people and engrafted upon our customs, habits and laws. The presence in our midst of representatives of world-wide workers in this magnificent cause gives an unusual opportunity for accelerating the educational part of the program.

"The modern crusade against tuberculosis brings hope and bright prospects of recovery to hundreds and thousands of victims of the disease, who under old teachings were abandoned to despair. The work of this Congress will bring the results of the latest studies and investigations before the profession at large and place in the hands of our physicians all the newest and most approved methods of treating the disease—a knowledge which will add many years of valuable life to our people and will thereby increase our public wealth and happiness.

"The International Congress on Tuberculosis is in the interest of universal peace. By joining in such a warfare against a common foe the peoples of the world are brought closer together and made to better realize the brotherhood of man; for a united interest against a common foe fosters universal friendship. Our country which is honored this year as the host of other



nations in this great gathering of leaders and experts and as the custodian of the magnificent exhibit which will be set up by the entire world, should manifest its appreciation by giving the Congress a setting worthy of the cause, of our guests, and of ourselves. We should endeavor to make it the greatest and the most fruitful Congress which has yet been held, and I assure you of my interest and services to that end.

"With expressions of appreciation for the compliment conferred in extending the invitation to become president of the Congress.

"Very respectfully,

"THEODORE ROOSEVELT."

Dr. Edward L. Trudeau has been elected honorary president of the Congress, and Vice-President Fairbanks, Speaker Cannon and the Governors of the States will serve as vice-presidents.

The German committee of arrangements for the Congress has a membership of over one hundred and fifty. The list forwarded to the Secretary-General by Dr. Nietner includes some of the highest dignitaries of the empire. Dr. von Bethmann-Hollweg, the president of the committee, is the Imperial Secretary of the Interior and the Vice-President of the Prussian Ministry of State. The vice-presidents are Count von Lerchenfeld, royal Bavarian State Counsellor and Ambassador Plenipotentiary, and Baron von Knesebeck, royal master of ceremonies and chamberlain to her majesty, the Empress; and the treasurer is Ernst von Mendelssohn-Bartholdy, a member of the Prussian Diet. Another distinguished member of the committee is Victor, Prince Hohenlohe and Corvey and Grand Duke of Ratibor. Drs. von Leyden, B. Frankel, Orth, Baginsky, and Nietner constitute the central commission, and others named on the list include Dr. Robert Koch, Dr. Emil von Behring, Dr. A. Frankel, Dr. Richard Neisser, Dr. Lydia Rabinowitch-Kempner, Dr. G. Pannwitz, Dr. Schottelius, Dr. Abb, secretary of the Civil Cabinet of the Emperor at Berlin; Dr. Bumm, president of the Imperial Board of Health; and Dr. Schjerning, general chief of the Army Sanitary Corps and of the Medical Division of the War Department.

A committee of sixty-four members has been appointed to arrange for the part Belgium will take in the Congress and in the exhibition to be held in connection with it. M. Beco, the Governor of Brabant, is honorary president and Dr. Dewez, President of the Belgian Anti-Tuberculosis League, is president of this committee.

#### RECENT ATTACKS ON SANATORIUMS.

The reaction against the tuberculosis sanatorium is quite natural but need cause no alarm. The pendulum of opinion swings because some great man, by an epoch-making discovery, moves the support to a new position. The pendulum follows but swings past the perpendicular and though it swings back it eventually comes to rest in the position the great man intended it should, and there it is kept at rest by the conservatism of mediocrity until some other great man pushes the support on again. Conservatism is the inertia of public opinion which is therefore always difficult to move and also to be stopped. Indeed it sometimes seems that "opinion" in or out of the profession is like dead matter—powerless to change its condition of rest or motion.

The sanatorium was designed merely to remove patients from deadly conditions and yet the idea grew up that it was essential and the recoveries

were permanent even if the cured returned to the conditions which caused the original disease. The pendulum swung too far and is now about to start on its return stroke and we must expect to hear denunciations of the sanatorium; indeed it has already been roundly abused by one French physician.

The reduction in tuberculosis mortality began over fifty years ago in England when the yearly death rate was forty per ten thousand population, but it has steadily declined until it is now less than 11.5. Dr. Bulstrode of the English Local Government Board, who made the recent report on sanatoria, shows that these institutions have not influenced the decline in the least. In addition he gives some rather painful statistics of the early death of the great majority of patients discharged from English sanatoria. Such results are inevitable unless the "cured" avoid the life conditions which originally broke their resistance. Home treatment is so perfected there should not be such relapses nor indeed is institutional treatment so essential as it once was when we could not remove the harmful conditions from the patient but had to remove the patient from the conditions. Nevertheless the sanatorium has come to stay, for it has proved its usefulness in permanently curing those who were willing and able to keep up proper living after discharge. It cannot accomplish the impossible, and the present reaction will only settle the pendulum of professional opinion in the right place.—*Interstate Medical Journal*, May, 1908.

#### THE VALUE OF INDEPENDENT THOUGHT.

To the young men in the profession, those who are at the beginning of life's journey, while I am now near its close, I would say:

"Be not like dumb driven cattle."

Be *men*, think, judge, act for yourself, cultivate a habit of independent thought and investigation, guided but not controlled by the study and investigation of the learned men of the profession, jealously preserve and protect your independence, be ever open and ready to receive knowledge regardless as to the source of such knowledge; many valuable truths have come from very humble sources. Take for your motto the words of Thomas à Kempis, who said, "mark not who said this or that, but mark the words spoken." Into your keeping, sooner or later will rest the honor and integrity of our noble profession, make yourselves worthy of the trust, no man can carry your burden. On your shoulders alone it must rest and you alone will be held accountable to God and your fellowman for the life you lead. Rest assured you will find it the part of wisdom to *think* for yourselves. Study closely the different theories advanced and judge them on *their* merit *not* on the merit or reputation of the man who advances them.—*H. C. Buck, M. D., Charlotte Medical Journal*.

**Tuberculosis Hospital Bill Passed.**—The Ohio House of Representatives, on February 7, arranged to pass the Braun bill, which authorizes the establishment of a county tuberculosis hospital by county commissioners, who may, instead, contract for the care of consumptives in hospitals in other counties. The hospital is to admit consumptives from county infirmaries, and \$3 a week or less may be charged patients who are able to pay.

# THE JOURNAL

OF THE

## Medical Society of New Jersey

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**JULY, 1908.**


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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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With this number of the JOURNAL we send the Index of Volume IV. and with the August issue we expect to issue The Supplement containing the Official Transactions of the Society at the last annual meeting and the alphabetical list of members.

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We give more space than usual to "Original Articles" in this issue of the JOURNAL and less to other departments, as they are of more than ordinary length and interest, and these special ones usually appear in the first issue after our annual meeting. We invite the careful attention of our readers to them as being worthy their thoughtful consideration and, where needed, of their practical suggestion of methods for the correction of evils and practices referred to, that are retarding progress in the science of medicine, injuring and in some instances disgracing the profession and hindering it in serving the best interests of their patients and suffering humanity generally.

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We have been obliged to defer till our next issue an able paper by Dr. H. A. Cotton, Medical Director of the State Hospital, Trenton, on "A Review of the Progress of Psychiatry," also papers by Drs. Linn Emerson and Samuel B. English, and other interesting matter.

The annual meeting of the American Association, in Chicago, June 2-5, was one of the largest and best ever held. Over 6,500 were registered and, counting the non-registered, it is estimated that more than 15,000 attended the various section meetings. In our next issue we hope to give a fuller account of that and other gatherings of medical men recently.

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### AN EXCELLENT ANNUAL MEETING

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We take great pleasure and satisfaction in the belief that in urging large attendance at our recent annual meeting we were justified in the statements we made—"We have a good program. We meet in a good place." That we did not exaggerate is demonstrated by the general consensus of opinion expressed at the close of the sessions that the addresses, orations and papers generally were exceptionally good, and also by the fact that the Committee on Scientific Work was continued for another year and the same place and hotel were selected for the next annual meeting—the latter an exceptional decision. Very rarely in the long history of the Society has it met twice in succession at the same place, especially when it was so remote from the sections of the State whence came the great majority of our members. The hotel surely is unsurpassed for general excellence, and for surroundings calculated to ensure good attendance at the sessions. We are also pleased to note that three of our suggestions for securing a good meeting were largely observed—"securing good attendance"; "seeking in every action taken by the Society the highest interests of the profession and the highest welfare of the citizens of our State," and "bringing the ladies with you."

The attendance was remarkably good: 7 officers, 13 fellows, 1 honorary member, 60 permanent delegates, 43 annual delegates, 83 associate delegates, 196 guests, including the ladies; in all, 403. Two of the fellows—Drs. William Elmer and Elias J. Marsh—were detained by severe illness; their absence was deeply felt and suitable action



was taken. We believe the actions taken were generally as indicated above, and in matters where there was doubt action was deferred. The doctors' wives, daughters and other lady friends were there in numbers exceeding those at any previous meeting, and their presence is always one of the most pleasing features of our annual gathering. The annual banquet, in the spacious and beautiful dining room of the Hotel Cape May was one that will be long remembered; the speeches by Dr. Stephen Pierson, Prof. Hobart A. Hare and Senator Joseph S. Frelinghuysen were admirable for eloquence and noble, uplifting thought and sentiment; they were greatly appreciated and very warmly applauded. Senator Frelinghuysen's tribute to the profession, and especially in its efforts to secure, through its committee on legislation and others who assisted (mentioning Dr. Henry Mitchell especially) wise and just laws for the public good rather than the pecuniary interest of its members, was beautiful and forceful. This annual meeting was surely a great success; the Editor believes it was the best of the thirty-five it has been his privilege and pleasure to attend.

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### OUR THANKS.

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The Editor returns his sincere thanks to the members of the Publication Committee for their kind words of appreciation of his services and of the JOURNAL's improvement in quantity and quality, as set forth in their annual report to the Society; also to the Board of Trustees for their practical endorsement—in substantial form—of the Committee's report, which action was subsequently approved by the Society. He also thanks his friends in the Board of Trustees and the House of Delegates who desired to more largely increase his salary, but yielded to his urgent request to withdraw their motions.

The kind words spoken and the action taken were sufficient to demonstrate that our work under existing conditions had given satisfaction. With one who was urged

to undertake this work and did so because of his deep interest in and desire to serve this most venerable and highly honored of State Medical Societies, other considerations than the largest adequate compensation obtainable should have influence. To us the hearty commendation has a value not to be reckoned in dollars and cents, and we express again our heartfelt appreciation and thanks to the members of the Society for what they did and for what—at our request—they refrained from doing.

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### PRESIDENT ILL'S ADDRESS.

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The address of President Edward J. Ill, on Medical Expert Testimony, at our recent annual meeting, which will be found on pages 45 *et seq.*, was a masterly one, in that it set forth fully and forcefully the evils of our present system; the sore need and the methods of their correction, and the practice concerning expert testimony in the various foreign countries. It was very warmly commended, but because of the fullness of the program and the pressure of other matters, we exceedingly regret that a committee was not appointed to consider some definite action by our Society for the correction of this great evil which has brought so much scandal on the profession that court and jury generally regard such testimony as utterly worthless and the public generally make the witnesses subjects of ridicule and rebuke. The worst is that the profession as a whole is made to suffer for the wrongdoing of the few.

It is evident from Dr. Ill's address and from the remarks of Judge C. H. Garrison at our annual dinner last year that it is useless to look to the courts for relief, or to hope that we shall have much assistance from the legal profession in any attempts to correct the intolerable conditions that attend most exhibitions of professional expertism. It must be done by our profession through our ethical code, making it impossible for any member of it to play the double rôle of witness and adviser or advocate and give such evidence or so much evidence as

will best help the lawyer who has employed him and secure a big fee; in damage suits a contingent fee—according to amount of damages awarded.

We ask our readers to carefully read Dr. Ill's address and these ringing words of Judge Garrison:

"If you will prohibit physicians from assuming the rôle of witnesses in cases where they are made advocates in fact by the effect their testimony has upon the compensation they receive, you will have done more for the good name of your calling than the law has ever done for you or for itself.

"If you will act, you will remove the most grievous blot on the 'scutcheons of both professions, for it is only in the Temple of Justice that the science of medicine is prostituted."

Let these words ring in our ears; give them heed as their importance demands and come up to our next annual meeting prepared to *act as Truth and Justice demand*. That means the maintenance of the honor of our profession and the good name of our Society.

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### THE ORATION ON SURGERY.

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Dr. M. H. Richardson's Oration on Surgery dealt very practically with the question, "When Shall the Physician Distrust His Own Judgment in Surgical Matters?" We have not time to do justice to this most excellent oration. It is worthy the most careful reading, consideration and action of every physician and surgeon; its suggestions carefully noted and followed would mean greater advance and success in the scientific work of both; more confidence in each other; more respect for both on the part of the public and better results for our afflicted patients.

Certain things we will note that impressed us on listening to it, and the impressions made have been strengthened by reading it since: The honesty, courage, manliness of the speaker in acknowledging his own mistakes in diagnosis and judgment; his wisdom and generosity in dealing with the re-

spective duties, responsibilities and mistakes of the general practitioner and the surgeon; his insistence upon the patient's best interests as the governing consideration in treatment, by both, and the beautiful tribute he, as a surgeon, paid to the general practitioner. From the latter we quote two paragraphs:

"The surgeon sees in the life of the general practitioner, one devoted to good works. He sees labor so absorbing and relentless that his own seems trifling. And, furthermore, he sees work done for the love of it, night and day. He sees the physician is the most beloved man in the community. But, at the same time, he finds him so unbusinesslike, so wrapped up in his work, that he is making no provision for his old age."

"At times when I have seen patients in consultation I am ashamed to see the difference between what I do for my fee and what the attending physician does for his; and I wonder that he does not distrust me rather than himself. The physician, poorly paid, after years of devotion to a family, sees the surgeon take for an hour's work more money than he will get for the attendance of a lifetime."

We have deemed these words worthy of repetition and remembrance. We were all glad to welcome Dr. Richardson among us for the first time, at Cape May, and greatly appreciated the sacrifice he made in coming. His address and personality made an impression that will ever make him a welcome visitor at our annual meeting.

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### THE ORATION ON MEDICINE.

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Dr. W. K. Newton's Oration on Medicine—Joint Affections Caused by Infectious Diseases—is a valuable contribution to our knowledge of these affections in that it differentiates the various forms of arthritis met with in adults and also in children. The etiology and pathology are clearly set forth, as are the diseases with which it is associated and are causative factors in this form, or rather these forms, of infectious arthritis, for there are several, as the doctor clearly points out. The paper is well calculated to accomplish what the doctor has expressed as



his desire in choosing this subject—to interest the general practitioner sufficiently to warrant his study of this class of arthritic affections and stimulate him to outline the proper treatment. There is no doubt that, from the lack of sufficient knowledge—because the literature on the subject has been scanty—as to the cause and effect of these forms of arthritis, they have often been classed under the head of rheumatism or as cases of Still's disease, when they are not rheumatic and many of them differ essentially from those that come under Still's classification and description.

At the recent annual meeting the Society took action, of a decisive character, against the Act which passed the Legislature at its last session reorganizing the State Board of Health and in favor of its repeal and the passage of a law—the so-called Launing Bill or one similar thereto—providing for a Commissioner of Health and an Advisory Board coöperating with him in the administration of our health laws, which is the more approved modern method and has given great satisfaction in Pennsylvania and other States. A copy of the resolution has not been secured in time for this issue of the JOURNAL. It will appear, with comments, in the August number.

## Correspondence.

### THE AGE OF MENTAL VIRILITY.

Dr. Dorland vs. Dr. Osler.

To the Editor of the Journal:

While it may not be true that Dr. Osler, in waggish willingness to keep alive a newspaper joke founded on one of his expressions, sent sixty-year-old twins a bottle of chloroform apiece in response to their invitation to their birthday party, it is true that he has brought down upon himself such a catalogue of cases in refutation of his theory as probably no other medical man of this age ever gazed upon for his special consideration and answer. In the April number of the *Century Magazine* Dr. W. A. Newman Dorland, without mentioning Dr. Osler, takes up what he calls "The Age of Mental Virility." Claiming that he sought a comprehensive view, and exercised the utmost receptiveness of mind, he took up four hundred records of men famous in all lines of intellectual activity. These men he divided into two classes, the philosophers and the inventors, the former including astronomers, mathe-

maticians, divines, reformers, dramatists, playwrights, essayists, historians, jurists, naturalists, novelists, political economists, poets, satirists, humorists and statesmen, while among the inventors he found actors, chemists, physicists, explorers, musical composers, physicians, surgeons and warriors. His catalogue is bewildering in the brilliancy of its names, and the achievements those names call to mind. He found that the average initial age of the four hundred records was twenty-four. The music composers began their life-work at the average age of seventeen; the actors began theirs at eighteen; warriors, artists, divines and jurists at twenty-two; dramatists and playwrights at twenty-three; poets, physicians, surgeons, inventors, chemists and physicists at twenty-four; and so on throughout the list to the satirists and humorists, whose initial age is thirty-two. The earlier initial ages are attributed by him to the emotional side of the nature, which begins to diminish when the person reaches maturity. Summing up the results briefly, he finds that intellect and judgment are strongest in the average person between forty and sixty, and he quotes the late DuMaurier as saying, "I think the best years in a man's life are after he is forty. A man at forty has ceased to hunt the moon."

In the light of these facts he asks whether precocity is a sign of degeneracy, as prematurely ripened fruit indicates decay and early death, but he points out that there is a healthful precocity due to parental influence and unconscious infantile imitation. Still, he says, a study of the mentality of a given person requires a comprehensive review of all his work and, looking upon his facts from this point of view, he finds an average age of fifty for the performance of the masterwork. This finding prompts him to give us the cheery dictum that, "provided health and optimism remain, the man of fifty can command success as readily as the man of thirty. Health plus optimism read the secret of success; the one God-given, the other inborn, also, but capable of cultivation to the point of enthusiasm."

Not content with his average of fifty for the performance of the masterpieces, or, perhaps, impelled by his facts again, Dr. Dorland gives another brilliant string of names, this time of men who did their best work, and some of the world's most valuable work, in their old age, and, as a piece of parting comfort to the sixty-year-old twins, quotes approvingly the saying of some unknown that "No strong man will accept sixty as the arbitrary limit of his ambition and working ability."

In the May number of the *Century Magazine* Dr. Dorland, calling Dr. Osler by name, takes issue boldly with the latter's statement that "The effective, moving, vitalizing work of the world is done between the ages of twenty-five and forty," and the further statement that, "Take the sum of human achievement, in action, in science, in art, in literature; subtract the work of the men above forty, and, while we would miss great treasures, even priceless treasures, we would practically be where we are to-day." Dr. Dorland calls his second article, "What the World Might Have Missed; the Great Work Done by Men Over Forty," and gives another catalogue that may impel Dr. Osler to send a sort of conditional apology to the sixty-year-old twins and overhaul his knowledge of history and biography.

ALEXANDER MCALISTER.

Camden, N. J., June 20, 1908.

**CLINICAL CASES.****DELIRIUM TREMENS AND OPIUM HABIT.****Cannabis Indica in Their Treatment.**

By Elihu B. Silvers, M. D., Rahway, N. J.

CASE 1. Some thirty-five years ago I was called at 1 o'clock A. M. to see a man suffering from delirium tremens. Before reaching the house I mentally resolved on a plan to subdue this man. I had been for a long time his family physician. On entering the house, I asked the wife if her husband had eaten anything. Shaking her head, she replied, "You know, doctor, he never eats at home while drinking," and, she thought, little elsewhere, unless a pretzel or some like small portion at the bars where he drank. I asked if she had a beefsteak; if so, to cook it and make toast and coffee, and as she willingly prepared to do my bidding, remarked: "It is no use, doctor; he will not eat." Recollect, I had not previously seen the patient. I went upstairs and found the three doors of his sleeping chamber guarded by three stalwart friends. The patient, with shirt and trousers on, one boot on and using the other boot to drive his friends away so he could get out. As I entered, he started for me with the upraised boot. I advanced straight toward him, with outstretched hand, saying: "Hello, Sam, is this the way you receive your friends?" The three guardsmen drew near, whispering, "Take care, he will kill you," but paying no attention to their warnings, I asked of the patient whose hand I now held, "What is all this fuss about?" and was told that he owned the premises, but these men would not let him out. Taking sides with him, I ordered them out. Reluctantly they withdrew, muttering, "Well, if you are such a d—d fool as to risk yourself alone with a madman, you can take the consequences." The patient by this time in full fellowship with me, asked me to help him on with his boot, which I did, when he said, "Come on, Doc, let's go out on a tear." Looking at the watch, I said: "Why, it is only 2 o'clock; where can we go?" and stated that I was hungry, and asked if there was anything to eat. "You might ask," he said. So, giving him some cannabis indica, as I told him, to quiet his nerves, I knocked on the floor as arranged with the wife, who brought what I had suggested. I made believe eat, helping him liberally and a plentiful meal he made, after which he reasserted a desire to go out on a racket. Showing him by the watch it was too early, he, without undressing, laid down on the bed, he behind, I in front. At short intervals he would spring up to a fighting posture and, recognizing me, lie down again, and in less than a half hour fell into a deep sleep. When assured of the permanence of this condition, I quietly left him, ordering the utmost quiet in the house. He slept until full noon of the day, when he awoke refreshed, took his dinner and went over to his books at the lumber yard, where his two partners, who had assisted in guarding him, were surprised at his normal condition. Since the Marconi discovery of wireless telegraphy, I have often thought that I, ere reaching my patient, must have established a mental connection with him, but what led me to order food must have been confidence in my hypnotic power to control. That the liberal dose of cannabis indica aided me, I feel assured.

CASE 2. A recent case of the cure of delirium in a man of thirty-five; an educated official, holding the double position of clerk of our Common Council and police justice; all the time half intoxi-

cated, it was a travesty on justice for him to adjudicate and lock up other drunks. He was warned by his political supporters to either stop drinking or resign his offices, as he was a disgrace to his party. Adhering to his debauched condition, the offices were taken from him; he sank so low that he would sit on the gutter stones, with both the contents of bowels and bladder in his clothes; his wife left him in disgust. A mutual political friend brought him to me, knowing that I had offered previously to cure him. I told him if he had remaining one drop of moral courage I would cure him. Placing him in good surroundings, I gave him of my formula of cannabis indica; appetite was soon restored; desire for liquor abated soon and, inside of sixty days, he was himself again. In order to fully test his reformation, I kept him under observation and had him whenever the temptation strongly assailed him take a small dose of his medicine. In three months he was fully himself again, was restored to his wife and, after six months reinstated in his former official positions. Five years have now elapsed and he is one of our most worthy officials.

CASE 3. A young widow, in despair at the loss of her husband, and with a cough which she supposed to be consumption; having tried many prescriptions for it, finally took large doses of paregoric, getting from it the best results, became a slave to its use and was in a doped condition most of the time. She was forcibly compelled to stop, and as a substitute was given, four or five times daily, 20 drops of cannabis indica on dry sugar. The formula being the same as for alcoholic excesses, except I use tinct. benzoin comp. instead of tinct. tolu, the formula being tinct. benzoin Co. 5vi and a reliable fluid extract of cannabis indica 5ij.

[We insert the doctor's report of these three cases, noting that he claims very extraordinary results from the use of his cannabis indica combination, and we query whether the cures he reports were not due to some remarkable hypnotic influence he exerted on these patients more than to the medicine he used, as we have failed to obtain such speedy and decided results from cannabis indica alone or in the combination Dr. Silvers suggests.—EDITOR.]

**Current Medical Literature.**

**Sterilized Milk for Infants.**—Observations for over five years on about 25,000 infants have convinced E. M. Sill (*N. Y. Med. Jour.*, February 8, 1908) that the advantages of the raw milk, when properly used, far outweigh any advantages which highly heated milk may possess. If milk is heated it should never be raised above a temperature of 140° Fahr. for twenty to thirty minutes, as the experiments of Russell and of Freeman show that this is sufficient to destroy the bacilli of tuberculosis, diphtheria and typhoid fever. Of the author's infants that were fed on sterilized or pasteurized milk continuously, or part of the time on one and part of the time on the other, 97 per cent. developed scurvy or rickets or a combination of the two. These infants had been fed for a varying period of from three to eighteen months on the heated milk; pasteurized milk was given during nine months of the year and sterilized milk during the three summer months. The milk was all carefully modified to suit the age



and digestion of each individual infant. About 20 per cent. of the infants had five feedings a day supplemented by breast feedings. These also had signs and symptoms of rickets, but in a degree less than those who were fed exclusively on pasteurized or sterilized milk. No infants fed on modified raw milk developed rickets or scurvy or any other disease due to improper feeding, such as anemia, malnutrition, marasmus, etc. In these cases of malnutrition raw milk was substituted with no other treatment, whereupon the children immediately began to improve. Infants which were in good health when fed raw milk, were attacked with symptoms of rickets when sterilized or pasteurized milk was given. An apparent exception to the results of the use of raw milk is the development of rickets in infants who have been fed for too prolonged a period on poor quality breast milk or poor quality and much diluted cow's milk, this having a deficiency of proteids and salts. In these cases immediate improvement and normal growth follows use of a milk of sufficient strength.—*Amer. Jour. of Obstetrics, etc.*, April, 1908.

**A Plea for a Neglected Remedy.**—Eustace Smith, in the *British Medical Journal*, February 29, 1908, deplotes the neglect in these later days of the use of antimony, which he regards as one of the best remedies in catarrhal states of mucous membranes. No other drug approximates its value in bronchial catarrh. Many of the cough mixtures given in the early stages of this malady are constructed on wrong principles. Ammonia, squills and paregoric in the earlier stages make the cough harder and the chest tighter. In this way a catarrh is driven back into the smaller tubes and in children a bronchitis may be turned into a pneumonia. Such remedies are all right for the later stages. The remedy *par excellence* for the earlier stages is antimony in small and frequent doses, stopping short of its depressing effect. It is well to combine it with a diaphoretic. The antimonial wine is undoubtedly the most convenient form for administration. Definite indications are difficult breathing, incessant and hacking cough, small and feeble pulse. In the early stages of bronchopneumonia, laryngeal stridor, upset stomach (here in small doses). An old-fashioned mixture for gastric pain after meals is one teaspoonful in half a glass of water as soon as the pain begins of a mixture containing one and one-half grains of tartar emetic, one ounce of magnesia, six drams of bicarbonate of soda and five drams of tartaric acid. Antimony is also a valuable hepatic stimulant, and is of service in inflammatory skin conditions, especially acute and chronic eczema.—*Medical Record*, March 21, 1908.

**The Use of Analgesics in Pediatric Practice.**—Dr. Le Grand Kerr, of Brooklyn, read this paper before the New York Academy of Medicine February 7, 1908. He summarized as follows: (1) They were all more or less transient in their effect, except in the case of a very few of the weakest ones. (2) They were all more or less objectionable, (a) because of the liability to the formation of the drug habit; (b) because of the irreparable damage done to a developing nervous system when their use was prolonged; (c) because of the dangers of overdosage (by accumulation); (d) because of the irritant effect which most of them possessed.

There were some well-defined rules in their administration, as follows: (1) They must be given only when absolutely necessary and after a careful consideration of the relief which might be obtained by their external and local rather than their internal administration. (2) They should not be given at a time or in such a manner as to obscure the diagnosis. (3) The cause of the pain must be removed whenever possible before the internal administration of an analgesic. (4) The dose should be very small at first and for three reasons: (a) The child might be susceptible to the drug used. (b) Relief might be obtained by the first dose and relief from pain in a child once established tended to continue. (c) The opportunity was offered for an increase in the dose later on if the demand arose. (5) Any one agent must not be used for a long time, but a change must be made from time to time to avoid tolerance and habit. (6) The dose should be small and frequently repeated instead of an initial large dose.—*Medical Record*, March 21, 1908.

**Hematuria in Pregnancy.**—E. A. Balloch, Washington, *Surgery, Gynecology and Obstetrics*, March, 1908. So-called idiopathic hematuria is now ascribed either to vasomotor changes or to chronic nephritis; the latter theory is gaining ground. Rovsing and Cabot believe that movable kidneys frequently give rise to hemorrhage. The author's case was that of a woman of thirty-one years. In her sixth pregnancy the hematuria again showed and never again disappeared, although varying in intensity, and still persisted when seven months after the birth of the child. The feet have been swollen since the first pregnancy; there were no symptoms of renal colic. Physical examination was negative except soreness over the left kidney region. The urine contained blood, but no casts; cystoscopy showed bloody urine escaping from the left ureter. As medical measures had failed, the left kidney was removed. A glomerulo-nephritis and increase of the interstitial connective tissue between the pyramids was found in the small kidney. In a subsequent pregnancy blood again appeared in the urine for a short time. Since then she has been well. This is the author's second case in which pregnancy occurred in patients with one kidney. Probably the increased or faulty metabolism during pregnancy proved too much for the single (nephritic) kidney and therefore hemorrhage recurred. In a similar case Balloch would now perform either decapsulation or nephrotomy, which has been found effective, and thus preserve all the functioning kidney tissue possible.

**Ectopic Pregnancy in the Stump of an Excised Tube, Causing Attacks of Intestinal Hemorrhage.**—H. N. Vineberg, New York, *American Journal of Obstetrics*, April, 1908, reports a unique case. The patient consulted him for repeated attacks of pain followed by the discharge of large quantities of pure blood from the rectum. One year previously her left ovary and tube had been removed for pyosalpinx. She had missed her last two periods, although previously regular, and had had seven attacks of pain and a similar number of hemorrhages during that time. The uterus felt enlarged and hard, and to the left of it was a mass the size of a fist. Operation revealed a small sac most intimately adherent to

the sigmoid, and formed partly by the stump of the tube and partly by the bowel wall, which, however, was not completely eroded. A complete hysterectomy was necessitated by the local conditions. Recovery was uneventful.

The case of interest for three reasons: (1) Only one other case of the formation of an ectopic in the stump of a tube is on record. (2) Intestinal hemorrhage due to erosion of the trophoblast has never been previously noted. (3) The uterine mucosa showed no decidual reaction; a very unusual state of affairs.—*Amer. Jour. Surgery*.

**Nursing During Acute Illnesses of the Mother.**—G. Guidi (*Riv. di Clin. Ped.*, December 8, 1907) concludes from his observations extending over a period of thirty years that there are few acute diseases which prevent a mother from nursing her child and that it is wrong to separate the child from its mother. The patient should be watched carefully as to the effect it is having on her general condition, and the child should remain with her only when it is nursing. The mother should be nourished so as to keep up the supply of milk necessary for the infant. Stopping the nursing has a bad effect on the mother as well as on the child. There are unknown means of defense against contagion in the mammary gland and in the milk for the infant. Although the germs may pass into the milk they seem to have no unfavorable effect on the child. Clinical observation confirms experimental results. The bacteria lose their virulence, the milk causing its attenuation. The infant's organism may react by the formation of antitoxic substances which neutralize the products of the bacteria.

**Fistula Between the Fundus of the Uterus and the Upper Portion of the Intestine. Operation. Cure.**—W. P. Graves, Boston, *American Journal of Obstetrics*, March, 1908. This unusual case was that of a woman of thirty-eight years, who was delivered of her ninth child by means of forceps by some unskilful physician. The uterus was evidently ruptured and intestine prolapsed into the vagina before the child was born. The gut had evidently then been removed. The patient recovered without severe symptoms. Seen six weeks after delivery by the author, she was found severely emaciated and delirious, with great erosion of vagina and buttocks. A uterine sound passed directly into the intestine. The discharge was from high up in the bowel, as it at times contained clear bile. Water injected into the rectum did not pass out through the uterus. On opening the abdomen it was found that the bowel had been severed two feet from the duodenum, the central stump entering the uterus below the left cornu; the peripheral end of the gut lay, at some distance, on the pelvic wall sealed up by adhesions. The gut was freed, a drain passed into the uterus and out through the cervix. The uterine wound was covered with the left broad ligament. End to end anastomosis of the ruptured intestine was done, a small drain inserted, and the abdomen closed; uneventful recovery.

**Diagnosis of Syphilitic Tumors of the Breast.**—Bissell (*Medical Record*, July 6, 1907) states that gummata of the breast are not as rare as the authorities would lead us to infer, and that such late syphilitic lesions can be quite easily differentiated by careful diagnosis. Many breasts sacrificed in the belief that they were cancerous

could have been saved by the proper diagnosis. In case of doubt an attempt should be made by the quick method of treatment to exclude absolutely the possibility of tumor being syphilitic. He reports five cases treated by one-fourth grain of arsenio-salicylate of mercury. He notes that gummatous tumors develop slowly and painlessly, that they ulcerate and discharge much earlier than cancerous nodules, that they are free from nodules early in their course, that the nipple as a rule is not retracted, that the lymph glands near may not be enlarged.

The best treatment is by means of injection of the arsenio-salicylate of mercury, one-fourth of a grain of which is given every third day until the tumor begins to disappear, and combined, if needful, with the internal administration of iodide of potassium.

## Obituaries.

### THEOPHILUS TOWNSEND PRICE, M. D.

Dr. Theophilus Townsend Price, aged 80 years, died on Monday, April 27, 1908, at the residence of Mrs. Abigail G. Townsend, Cape May, from the effects of paralysis with which he had been afflicted for nearly a year. When stricken he was practicing his profession at Tuckerton, and was taken to Cape May, in the hope of his recovering, but his age, although he was well preserved for his age, was against him, and he succumbed, dying peacefully a Christian death.

Dr. Price was born on the Price homestead plantation at Town Bank, Lower Township, Cape May County, on May 21, 1828, and was the seventh child of John and Keziah (Swain) Price, the latter being a daughter of Daniel Swain. Both the Swain and Price families are of the oldest in Cape May County.

When three years of age his father removed to a farm above Cold Spring, and on this farm the doctor lived until he reached manhood, and attended the common schools and later the Cold Spring academy.

From his twentieth to his twenty-third year he taught Cape May County schools. In 1850 he began the study of medicine under the direction of the late Dr. Virgil M. D. Marcy, of Cape May, who then resided at Cold Spring. In March, 1853, he was graduated in medicine and the same spring settled at Tuckerton, where he resided until stricken with paralysis.

In November, 1854, he married Eliza, youngest daughter of Timothy Pharo, and by this union he had two children one of whom is living—Rev. Theophilus P. Price, formerly pastor of the First Baptist Church, of Cape May and now State Fire Warden for the New Jersey State Forestry Commission. He married for his second wife about ten years ago, Mrs. Mary E. Williamson, who still survives him.

Soon after his settlement at Tuckerton he became interested in and identified with the public affairs of the communities in which he lived. The township of Little Egg Harbor, in which the village of Tuckerton is located, was at that time a part of Burlington County. He became a member of the Burlington County Medical Society in 1854 and remained a member thereof until the time of his death. He was township superintendent of the public schools of Little Egg Harbor for eight years and until the law was passed abol-



ishing town superintendents and creating county superintendents. Dr. Price was connected with educational matters in Tuckerton for over fifty years. During a greater portion of that time he was President of the Board of Education. He was ever zealous for the best interests of educational matters and possessed a patriotic spirit of remarkable degree. He was a trustee of the South Jersey Institute, at Bridgeton, for nine years.

In 1865 he organized and conducted for four-teen years a union mission Sunday school in a destitute neighborhood near Tuckerton; was instrumental and active in organizing the first Baptist Church at West Creek, Ocean County, in 1876, of which he was chosen deacon, clerk and treasurer for fifteen years. In 1891 he was actively instrumental in organizing and constituting the Baptist Church of Tuckerton, of which he was a licentiate, deacon and clerk.

He was postmaster of Tuckerton during the Lincoln and Johnson administrations; was elected to the New Jersey Legislature in 1868. During this service he obtained a charter to build a railroad from Tuckerton to Egg Harbor City, and a supplement to a charter to build a railroad from Manchester to Tuckerton. The latter road, now the Tuckerton Railroad, was built in 1871, of which he was elected a director and secretary, remaining in that capacity until his death. He was a director of the National Bank of Medford, N. J., for thirty-five years.

He was also a trustee of the New Reform School for Boys at Jamesburg for three years; president of the Board of Trustees of the Camden Baptist Association, president of the Board of Education of Little Egg Harbor, physician and secretary of the Board of Health, director and secretary of the Beach Haven Land Association, life member of the New Jersey Historical Society and president of the Board of Trustees of Tuckerton Library Association.

For seventeen years he held the office of United States Marine Hospital surgeon at the port of Tuckerton and until the office was abolished by the government, March, 1896. During this time he examined annually about one hundred and fifty life-saving men before they entered on their duties. He has contributed from time to time articles to the press, both in prose and verse, and has delivered many public addresses and lectures.

In 1877 he wrote the descriptive and historical portions of the New Jersey Coast Atlas, published by Woolman & Rose, covering the first sixty-eight pages of that work. He was the author of the popular "Ode to Cape May," which has been sung in old families of Cape May for years, and which is published in full on the first pages of Lewis T. Stevens' "History of Cape May County."

Tuckerton and its progress was ever dear to him, and that town and other towns where his influence has been felt are better to-day from the life and example of this honored and beloved Christian gentleman.

The funeral services were held April 30, in the First Baptist Church, conducted by Rev. H. P. Crego, the pastor, assisted by Rev. James Burns, pastor of the First M. E. Church, who was a personal friend of the doctor. The interment was made at Cold Spring Presbyterian Church cemetery.

**SWARTSWELLER.** In Danielsville, Pa., June 8, 1908, Dr. P. E. Swartsweller, aged 65 years. He

was a former resident and practicing physician in Belvidere, Warren County, N. J. He was a brother of M. C. Swartsweller, who was at one time surrogate of Warren County. He was a member of the Warren County Medical Society and was jail physician for many years. He was a member of the First Presbyterian Church, of Belvidere, and was buried there June 12th.

## BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

### Monthly Statement of Vital Statistics— May, 1908.

The total number of deaths reported to the Bureau of Vital Statistics during the month ending May 15, 1908, was 2,602, a decrease of 532, compared with the previous month, and 386 less than the corresponding period last year. The deaths by age periods for the last two months are as follows:

	April.	May.
Under 1 year .....	559	453
1 to 5 years .....	276	256
Over 60 years .....	961	782

The greatest decrease is in persons aged 60 years and over, and is no doubt due to the favorable weather conditions during the spring months. There has been no prolonged low temperatures which so depress the vitality of persons in advanced years and other individuals in feeble health. The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending May 15, 1908, compared with the average for the previous twelve months; the latter are given in brackets:

Typhoid fever, 28 (37); measles, 27 (13); scarlet fever, 46 (30); whooping cough, 23 (20); diphtheria, 41 (52); malarial fever, 3 (2); tuberculosis of lungs, 348 (300); tuberculosis of other organs, 60 (51); cancer, 112 (122); cerebro-spinal meningitis, 24 (32); diseases of nervous system, 319 (377); diseases of circulatory system, 214 (330); diseases of respiratory system (pneumonia and tuberculosis excepted), 176 (181); pneumonia, 253 (266); infantile diarrhoea, 52 (205); diseases of digestive system (infantile diarrhoea excepted), 143 (199); Bright's disease, 202 (212); suicide, 46 (33); all other causes, 485 (507); totals, 2,602 (3,066).

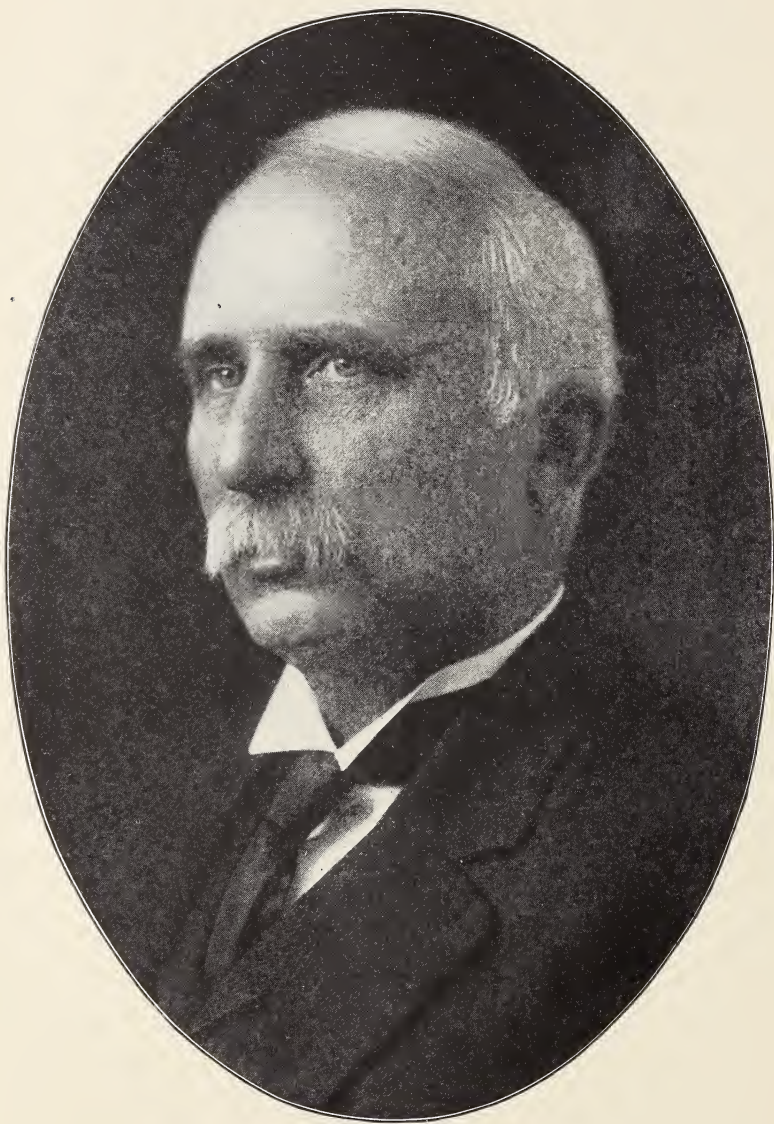
**Food and Drugs.**—During the month ending May 31, 1908, 544 samples of food and drugs were examined in the State Laboratory of Hygiene. Of these we give a few items, as follows: Above the standard all samples cocoa, 17; ginger, 9; mace, ground, 14; mustard, ground, 35; black pepper, 50; cream tartar, 12; olive oil, 5. Below the standard: Milk, 54 out of 270; butter, 4 out of 8; coffee, 3 out of 10; extract of lemon, 3 out of 6; extract of vanilla, 2 out of 13; molasses, 3 out of 23; alcohol, 2 out of 3; tincture of iodine, 2 out of 2; tincture of opium, 2 out of 2. Number of samples of water analyzed, 47.

**Bacteriological Examination for Diagnosis.**—From suspected cases of diphtheria, 168; tuberculosis, 306; typhoid fever, 113; malaria, 20; miscellaneous, 19; total, 626.

In prognosis a physician should never make deductions from his fears, but only use the present facts from which to draw conclusions.—*Golden Rules of Pediatrics.*







D. J. Miller

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## ADDRESS OF THE THIRD VICE-PRESIDENT.\*

### A Brief Review of Hernia, as Understood and Treated at Different Epochs by the Past and Present Masters of Surgery.

By Thomas H. Mackenzie, M. D.,  
Trenton, N. J.

Hernia is a subject that has engaged the attention of a large portion of the human family from the most remote period to the present time.

This is due to the fact that about one in five is afflicted with this disease. The subjects of hernia have in the past, as now, suffered from the encumbrances, discomforts and dangers attending this disease, and have at all times sought relief at the hands of those whose business it was, and is, to relieve the suffering. From time immemorial, therefore, the medical profession has had this subject before it for consideration and treatment.

Notwithstanding the fact that anatomists at a very early period had a fairly clear conception of the nature of hernia, the elements that enter into it, the principal kinds of hernia, yet the disease was neglected by the profession until the eighteenth century, and the treatment was, up to that time, in the hands of itinerant quacks. But since then it has received the attention of the most eminent surgeons of all countries.

It will be interesting to observe the evolu-

tion and trend of surgical thought relative to this subject from the earliest time to the present. Eminent surgeons of the past confined their efforts to reducing the hernia and retaining the replaced organ by a well-adjusted truss. Their ingenuity was taxed to its utmost to invent an instrument or truss designed to answer the purpose of a retentive apparatus. The number of trusses before the profession was immense; it would require a large volume to describe them.

The principal difference of these instruments relate to the nature, form and arrangement of the pad, which consists of wood, ivory, glass, india-rubber, or some soft material. This pad was circular, oval, oblong, convex or cup-shaped. The first great improvement in the construction of a truss was in substituting a wooden block for the soft pads formerly in vogue. The soft pads were merely designed to retain the reduced hernia, for such a thing as a radical cure was hardly ever thought of.

The hard truss, invented by American surgeons, not only effectually answers the purpose of a retentive apparatus, but, by its steady, gentle and uniform pressure over the external ring, often cures the disease by causing adhesion and obliteration of the sac. The trusses of to-day are a great improvement upon the crude devices used by the ancients and in every respect far superior to those in use even a quarter of a century ago. They combine cheapness and finish with extraordinary efficiency and have, in many instances, not only retained the reduced bowel, but cured the disease.

Progressive surgeons, however, were not satisfied with the results obtained by the use of the truss. Their great aim was then, as to-day, to produce a radical cure of the disease, and we find that various methods

\*Delivered at the 142nd annual meeting of the Medical Society of New Jersey, Cape May, June 19, 1908.



have been suggested having that object in view. Of these, some date back to remote periods of the profession and partake largely of the rude nature which characterized the practice of the older surgeons.

Among the operations performed in those days may be mentioned excision of the sac, without any effort at closing the ring; exposure of the sac and ligation at its neck; incision of the sac and the use of irritants for the purpose of inducing its obliteration. In scrotal hernia the testicles were often extirpated along with the hernial sac. We are informed that this practice was so common in the seventeenth century that an itinerant operator was in the habit of feeding his dogs with the organs he thus removed.

These operations not only caused much suffering, but resulted in the loss of many lives.

Of more recent origin may be mentioned the operation practiced by Gerdy, a French physician, about 1820. His operation was principally adapted to the inguinal variety. It consisted in pushing up a fold of skin as far as possible into the neck of the sac, and confining it there by two silk sutures introduced through all the tissues, muscles, fascia and skin, and the ends being tied over a piece of bougie. The piece of inverted skin was then denuded of its cuticle with spirits of ammonia, and inflammation followed, resulting in adhesions of the parts to the neck of the sac, and a permanent cure was expected. This operation was not free from danger. It rarely, if ever, proved successful; hence it fell into merited disfavor.

Guerin, another French surgeon, originated an operation, which met with the same fate. It consisted in scarifying the neck of the sac by a bistoury introduced subcutaneously, after which a truss was employed to approximate the surface, producing inflammatory adhesions and obliteration of the neck of the sac.

Bonnet of Lyons, in 1836, practiced acupuncture. It was performed by transfixing the sac by a number of pins which were permitted to remain until ulceration of the skin was produced, compression being exercised afterwards for the purpose of promoting adhesive action. Bonnet reports that, of eleven cases treated by him, and by this method, four were cured, five were unsuccessful and two proved fatal.

A physician of Baltimore, many years ago, succeeded in effecting a radical cure by dissecting up a small flap of integument from the neighborhood of Poupart's ligament and inserting its free part, three-quar-

ters of an inch in width, into the femoral canal. The edges of the wound were then sutured over the flap thus inserted. The wound supplicated, of course, but soon got well. The transplanted integument contracted into a hard knot over the femoral ring, closing it completely; the recovery being perfect.

Dr. Wutzer of Bonn, in 1838, invaginated a portion of skin, as originally suggested by Gerdy, into the inguinal canal. The invaginated skin was held in position by a complicated apparatus which he invented for that purpose.

This apparatus consisted of a wooden cylinder with a curved needle concealed at its distal end, and a wooden cover. The wooden cylinder was inserted into the inguinal canal, carrying before it the invaginated skin and a portion of the sac. The concealed needle was then pushed through the sac of the hernial canal and the integument, the cover was then screwed moderately tight upon the skin. The protruding portion of the needle was protected by a piece of cork.

The apparatus was retained upon an average of from six to eight days, when it was removed, and the patient required to remain upon his back in bed for ten days longer.

Prof. Agnew, of Philadelphia, has simplified the above operation. He invented a steel instrument resembling a bivalve speculum. This instrument had two blades, corresponding respectively to the wooden cylinder and wooden cover of the Wutzer apparatus. The lower blade of this instrument contained two longitudinal grooves. The instrument was employed to carry the invaginated scrotum to the upper extremity of the inguinal canal. The inverted scrotum was retained in the canal by silver sutures introduced by a needle through the grooves in the under blade in such a way that the invaginated plug was thoroughly embraced by the loop of wire, the ends of which were twisted over a roll of lint upon the surface of the abdomen. The sides of the inguinal canal were next approximated by sutures introduced between the blades of the instrument.

A variety of modifications of this operation have been performed by different surgeons with varying degrees of success; one operator reporting one hundred and seventeen cures in a total of one hundred and forty cases; while another informs us that, of fourteen persons operated upon by Dr. Wutzer, not one was radically cured.

Within comparatively recent times, the

injection into the neck of the sac of some mildly irritating fluid has been employed by no less eminent men than Drs. Velpeau of France and Pancoast of this country. This method has since met with favor and some degree of success in the hands of others who have employed it.

A seton has also been employed at various times and by different surgeons for the cure of this disease. It was introduced through the hernial sac and inguinal canal by a suitable instrument, one end of the seton being brought out at the internal ring, the other at the scrotum. The object of this operation was to produce obliteration of the neck of the sac. The reported success attending this difficult, but apparently simple, device is incredible, for out of thirty-four reported cases, twenty-nine were claimed to be cured.

A review of the methods employed and the operations performed by the past masters of surgery would be incomplete without mentioning the operation originated by Dr. John Wood of London. It consisted in making an incision about an inch long in the skin of the scrotum over the hernial sac. The skin was then dissected from the deeper covering of the sac for the distance of an inch or more, all around the incision. The surgeon's finger introduced into the scrotum pushed the detached fascia and sac into the inguinal canal, and a suture so applied as to draw the invaginated fascia and sac well up into the canal and retained there, and at the same time approximate the pillars of the ring.

The foregoing are among the important methods employed by the fathers in surgery for the radical cure of hernia. The reported cases would seem to indicate a greater degree of success than the crude methods employed would warrant, and, in view of our present knowledge of the subject, more than we can be reasonably expected to believe. What surprises one is not that these methods were practiced in ancient times, but that they should be repeated at a comparatively recent period.

Since the introduction of aseptic surgery, these operations have been superseded by the open method.

Before entering upon the consideration of the methods employed in recent times, by our more advanced surgeons, it might be well to inquire into the etiology of oblique inguinal hernia and the bearing that it has on the correct technique for the radical cure of the disease.

The causes may be divided into predis-

posing and exciting. Among the most important of the former may be mentioned the congenital, or preformed sac.

I believe that the total obliteration of the processus vaginalis, excepting so much of it as enters into the formation of the tunica vaginalis, is found in about 75 per cent. of all male subjects. In the other 25 per cent. various degrees of patency may be found. The entire length of the processus vaginalis, or portions of it only, may remain patent. Persons in whom the entire process remains patent are subject to what is known as congenital hernia. The size and length of a hernial sac will, therefore, depend upon the degree of obliteration or patency of the processus vaginalis.

Among the eminent surgeons, who hold that the preformed sac is the chief causative factor in oblique inguinal hernia, may be mentioned Coley of New York, Murray of Liverpool, and Russell of Australia. Russell believes that every inguinal hernia has a preformed or congenital sac. I think that the present trend of surgical thought is toward that view.

Surgeons performing operations for the radical cure of hernia frequently find convincing evidence bearing out the foregoing conclusions. I will here cite one of a number of cases that has come under my own observation. A young man, while strenuously riding a bicycle, fell with great force and injured himself severely. He was taken to his home and I was sent for. Upon examination, I found him suffering from an oblique inguinal hernia, which taxis failed to reduce. He was sent to St. Francis Hospital for operation, which was performed as soon thereafter as it was possible for him to be properly prepared.

The operation disclosed a long, narrow hernial sac of thin delicate structure extending to the scrotal junction. Upon the sac being opened it was found to contain bowel only. The constricting band was incised and the bowel returned to the abdominal cavity. The sac was so firmly adherent to the cord that it was impossible to separate them without doing irreparable damage to the blood vessels of the parts; hence I was compelled to cut it away on either side close to the cord, beginning at the lower end of the sac and terminating near the internal ring. It was then tied off by a purse string suture, so applied as to include that portion of the sac attached to the cord at this point. The balance of the operation was completed in the usual way, the patient making a good



recovery, and, as far as I know, a permanent cure was effected.

This patient had no evidence of previous hernia. The circumstances, in this case, seem to clearly indicate that the intra-abdominal pressure attending the accident was sufficiently great to force the bowel through the internal ring into the preformed sac, this being the point of least resistance. For, if not preformed, then it must have been acquired; and, if acquired, the following conditions must have obtained: The peritoneum composing the sac must have been forced through the canal and orifices at the time of the accident. It must have also acquired the shape and dimensions found at the operation. And, lastly, must have been firmly and intimately adherent to the spermatic cord. And all of this must have occurred in a few hours, which was impossible. It is evident then that, in this particular instance, the sac was congenital or preformed.

Dr. Murray has proven that a preformed sac frequently exists without rupture. He has found, as the result of careful post-mortem examinations on two hundred bodies, in which there had been no history of hernia during life, that forty-seven of this number had peritoneal, diverticula, or potential hernial sacs. Of this number, thirty were males and seventeen females. Dr. Coley believes that a considerable number of individuals would carry these sacs to the grave without their becoming true hernia were it not for the coëxistence of some exciting cause in the way of lifting, straining or other unusual effort, forcing the bowel or omentum, or both, into the latent empty sac.

Among other predisposing causes may be mentioned inordinate size of the normal outlets of the inguinal region, defective development and unusual laxity of the walls of these outlets, distention of the abdomen by ascites and obesity. Individuals, in whom these conditions exist, are liable to rupture. The tendency to rupture, however, will depend largely upon the degree of susceptibility—that is, upon one, or all of the predisposing causes, and may occur with or without exciting cause. If in an individual with a high degree of susceptibility there be added such exciting causes as lifting, jumping, straining or any effort calculated to produce intra-abdominal pressure, such an individual would be likely to rupture during such effort.

It now remains for us to consider the best method of treatment. Knowing the cause,

the remedy will suggest itself, and, if failure of closure of the processus vaginalis and weakness of the structures entering into the formation of the inguinal canal are the chief causative factors, it is clear that the best treatment would be to remedy these defects, either by causing obliteration of the sac or excision of the same, and fortifying the structures of which the canal is composed. For, if operative measures for the radical cure are not resorted to the patient will be compelled to go through life with a very annoying and dangerous affliction. Annoying because of the fact that it necessitates upon the part of the patient the continuous wearing of a truss, with all the discomforts attending the same. Dangerous, because strangulation is liable to occur at any time, and also because the hernia may become irreducible, with all its attending dangers and many complications.

It, therefore, becomes the duty of the surgeon to inform this class of patients of the facts pertaining to the disease and urge upon him the advisability of an early operation. The patient should be informed of the chances for success and the slight risk attending the operation.

Dr. Coley reports that, of two thousand and thirty-two operations performed at the hospital for Ruptured and Crippled for the radical cure of hernia, only one death occurred and that was in a stout woman with a strangulated umbilical hernia. He further reports another series of eleven hundred and eighty-five cases of inguinal hernia, in which the operation was performed according to the Bassini method, with only nine relapses, or .7 of 1 per cent.

When we compare these results with those obtained by the operations performed from 1874 to 1878 after the methods of Steele, Czerny and Marcy, in which the statistics show from 30 to 40 per cent. relapses and a mortality of 6 per cent., we are struck with amazement at the achievements of modern surgery and the advancement made by modern methods. The brilliant results obtained by Bull, Coley and other surgeons along these lines are calculated to stimulate surgeons generally to put forth their best efforts to obtain similar results.

Success attending these operations will depend upon how well the work is performed, and there is no reason why any surgeon, having a clear knowledge of the parts, the pathology of the disease and the different steps of the Bassini, or some similar method, should not meet with as equally

good results as those reported by Bull and Coley.

The results attending my first efforts toward effecting a radical cure were very discouraging. Of 280 individuals with hernia, upon whom I have operated, 10 were umbilical, 5 femoral and 265 inguinal. In 40 of this number the operation was performed for the relief of strangulation, 5 of these cases were umbilical, 4 femoral and 31 inguinal. Three of the 40 were gangrenous, 2 of which proved fatal, and the other, upon whom I performed resection of the gangrenous bowel and terminal anastomosis by the use of Murphy's button, made a good recovery.

My first 100 cases were performed before the epoch making period in the history of the radical cure of hernia, when Bassini and Halsted published their methods. Of this 100, about 25 or 30 per cent. relapsed. The operation in those cases was performed by the methods in vogue at the time. They were usually those described and employed by no less eminent authorities than Czerny, McBurney and MacEwen.

In the other series of 165 cases, operated upon since 1892, and in which the principles involved in the Bassini method were followed, there were no deaths and the relapses were reduced to about 4 per cent. Fifty-two of the latter number occurred in the New Jersey State Prison, where one has an unusually good opportunity to observe results. Two only of the number operated upon in this institution relapsed. One of these was in a feeble old man with an irreducible hernia of several years' standing. The muscles entering into the formation of the canal and orifices were weak and patulous. The bowel and omentum contained in the sac were found firmly adhering to the sac and each other. The adhesions were broken up with some difficulty, the diseased omentum was removed, bowel reduced, sac dissected out and tied off flush with the abdominal peritoneum. The cord was then transplanted, and the muscular tissue approximated in the usual way. There was no tendency to relapse for the first eighteen months, at which time the muscles in the inguinal region began to yield to intra-abdominal pressure and general bulging of the muscular structure in that region followed. There was no recurrence of the sac, however, neither could there be any ring or opening detected.

The other was in a young man, upon whom I performed the Bassini operation. There was no relapse in his case until four-

teen months thereafter, when a small hernia appeared at the upper end of the wound at a point corresponding to the internal ring. The relapse in this case was probably due to failure on the part of the operator to remove the entire funicular process.

I think it has been satisfactorily demonstrated by the results obtained at the hospital for Ruptured and Crippled, that the operation is practically free from danger and that a radical cure may be reasonably expected in 99 3/7 per cent. of all cases in the hands of efficient and painstaking surgeons.

In concluding this paper, I desire to briefly refer to the principles involved necessary to success. In the first place, primary union is *sine qua non*. To attain this, asepsis must be as thorough as it is possible to have it. In the second place the sac must be dissected out and completely removed well beyond the neck and flush with the abdominal peritoneum, thus entirely obliterating the funicular process. And to do this effectually the aponeurosis of the external oblique must be cut up as far as the internal ring. In the third place, the conjoined tendon of the transversalis and internal oblique must be sutured to the under part of Poupart's ligament, as it appears in a fold where its edge has been drawn away by a sharp retractor.

The best suture material in those cases is either chromicized catgut or kangaroo tendon. In passing the sutures, the surgeon should be careful that a good hold be taken of the conjoined tendon and the ligament. At the same time, great care should be exercised lest the artery, which lies very near the ligament, be injured. From four to six sutures are usually sufficient to close the canal. The aponeurosis of the external oblique is now sutured to the edge of Poupart's ligament, and the superficial fascia and skin closed in the usual way.

Experience has taught that it makes little difference whether the spermatic cord be transplanted or not. If, however, the operator elects the Bassini method, he will first isolate the cord and give it to an assistant, who will hold it out of the way, while the conjoined tendon is sutured to the lower shelving of Poupart's ligament. The cord may then be laid upon this wall forming the posterior wall of the new inguinal canal. The edges of the aponeurosis should now be sutured over the cord forming the anterior wall of the new canal, and the balance of the operation completed to suit the fancy of the operator.



If, however, the Halsted method be adopted, the cord is transplanted to a higher plane, and is laid upon the external oblique after it is sutured to the edge of Poupart's ligament. The new inguinal canal in this instance is bounded, posteriorly, by the external oblique; and anteriorly by the superficial fascia and skin.

Of the two methods, the Bassini has met with the greater favor and is the one usually adopted.

It might be well, before concluding this paper, to make allusion to some of the difficulties that the young surgeon may encounter in performing this operation. Among them may be mentioned that of finding or recognizing the sac.

When an incision is made parallel to Poupart's ligament and the tissues divided down to and exposing the external ring and cord, the sac may be recognized as it lies against the cord and protruding from the external ring, and may be distinguished from the tissues surrounding the cord by its color, lustre and texture. If, however, the operator is in doubt as to whether this be the sac or not, his doubt may be expelled by picking up and dividing the tissues between two hemostats.

If, on dividing the tissues thus picked up, a sac-like opening reveals itself, into which he can introduce his finger, passing it through its neck into the abdominal cavity, he will be absolutely certain that he has the sac which he was seeking. But, if in his first effort, he has failed to find the sac, he must continue to pick up and divide the tissues in the vicinity of the cord until it is found.

Having found the sac, his next difficulty will be in dissecting it away from the cord without doing violence to the *vas deferens* or the blood vessels of the parts. Rather than endanger these vessels by dissecting away the sac, it will be infinitely better to stretch it on either side of the cord, and thus enable him to cut it close to the cord, from its base to the internal ring, at which point it may be tied off by the use of a purse string suture so applied as to include that portion of the sac attached to the cord. If there be any hemorrhage, it can easily be controlled by a continuous catgut suture. I have frequently practiced this device with gratifying results.

The brilliant results obtained by present day methods in the operation for the radical cure of hernia is as true of femoral as of the inguinal variety. Bull and Coley report

a series of 125 operations for the cure of femoral hernia, without a single relapse.

I believe the preformed sac to be a causative factor in this, as in inguinal hernia, and further believe that the secret of the success of this operation largely depends upon high ligation of the sac with thorough removal of extra peritoneal fat and closing the femoral ring with a purse string suture of either silk or kangaroo tendon.

The suture is introduced through Gimbernat's ligament, passes down through the pectineal fascia, around the floor of the femoral ring and the fascia lata, over the femoral vein, and emerges through the roof of the canal at about one-quarter of an inch from the point of introduction. When the ligature is tied, it closes the femoral ring effectually.

The brilliant success obtained by the modern methods for the radical cure of hernia is made possible by anæsthesia and asepsis; and, when one considers that one-fifth of the human family are afflicted with this disease, and that 99 per cent. of those afflicted may be cured by an operation, with little, if any, danger to life, we can form some slight conception of the progress made and good accomplished by modern surgery.

## THE DIAGNOSTIC IMPORTANCE OF VOMITING IN CHILDHOOD.\*

By Arthur Stern, M. D., Elizabeth, N. J.

In attempting to write an article on a symptom of such great frequency, I am well aware, that in order to be complete, I would have to transgress all boundaries of a paper, as well as overtax your patience; therefore, should I dwell on some forms of this frequent sign in infantile diseases longer than on others, I will have to beg your pardon, for through personal experience I find one is more impressed with the cases of rarer occurrence, than the everyday happenings in general practice.

Charles Gilmore Kerly, in his recent work on the "Treatment of Diseases of Children," says: "While vomiting does not constitute a disease in itself, it is a condition of such frequency in children, and occurs in such widely varying circumstances, that any work relating to diseases of children would be incomplete without its consideration."

\* Read at the 142d annual meeting of the Medical Society of New Jersey, Cape May, June 18, 1908.

We may differentiate between two great groups of vomiting—the accidental and the habitual forms. According to Pfandler, we meet with eight different forms of vomiting, as follows: 1. Cerebral vomiting; 2, gastro-intestinal and peritoneal vomiting; 3, prodromal and initial vomiting in acute infections; 4, vomiting following intoxications, brought into the system from without, or in auto-intoxications; 5, vomiting following agitations of the body, such as cough, pertussis, and so on; 6, vomiting accompanying irritations of the pneumogastric nerve. Paralysis following diphtheria with myocarditis (vomiting means fatal ending); 7, neurotic vomiting; 8, miscellaneous, due to irritations from adenoids, tonsils, digital examinations of pharynx, sun-stroke, all forms of anæmia, pseudo-leukæmia and hemorrhagic purpura.

The stomach in nurslings responds so readily to any irritations, that in olden times it was considered good for a baby to throw off a part of the milk taken. A symptom of such frequency, says Henoch, in his text-book on children's diseases, cannot be considered pathological, and he attributes this form of regurgitation of food, firstly, to the peculiar vertical position of the stomach up to the tenth month of infantile life; secondly, to the lack of development of the fundus and the greater curvature; and thirdly, to the lesser capacity of the stomach.

The stomach of a child not only responds to irritations brought into it from without, but even in distant diseases, it gives evidence of the disturbance going on in the system by discharging its contents in an attack of vomiting; and right here we are confronted with the question: Is this action of the stomach merely a symptom, such as a chill, or a pain, or an increase of temperature, or is it a way provided by nature of throwing off poisonous substances, and thus making an effort of draining the system of the introduced or formed toxins? In all probability it is both, for we shall see that vomiting may be caused by direct irritation as well as by any other conditions, which can only be accounted for by the natural efforts of the system fighting against the poisons introduced, be they of an organic, inorganic, or organized form.

During the first two years of life, the stomach plays a very important part, in easily responding to any irritations, by vomiting. As we mentioned above, during the first year, the stomach gradually changes from the vertical position of foetal life, to

the transverse position. The position of the stomach alone being responsible for its disturbance is hardly credible, for we find that vomiting is just as frequent in the second year of life, when the stomach is in the normal position, as in the first year.

Holt considers that form of vomiting which appears after feeding, as a safety valve for the over-distended stomach, but it stands to reason that the cause for vomiting must be attributed to the fact that the stomach has not had time to digest the previous contents, and therefore cannot form new quantities of acid and pepsin; and when the newly introduced food enters, it finds a half distended stomach, and not enough acid to bind, and we therefore find regurgitated milk, which is hardly different from the milk which the child had just taken. If at its first appearance, mothers would realize the danger of this most frequent form of vomiting (the gastro-intestinal form), a good many lives might be saved during the hot summer months, and if they would lay aside the old superstition that teething is the cause of vomiting and diarrhoea, the physicians would have an earlier opportunity to help nature expel the toxins, which often have already done their deadly work, before the child comes under their observation. Although during the last years, commonwealths and philanthropists, guided by physicians, have done a great deal toward the elimination of the summer mortality of infants, and the prevention of gastro-intestinal diseases, still, in our State, there is much room for improvement. Cities or boards of health must arrange, so that the poorer classes, where this evil is most prevalent, can be furnished with pure milk food, and these people must be taught the symptoms and dangers of gastro-intestinal diseases, of which vomiting is the foremost sign.

The cerebral form of vomiting is a very early sign of brain disturbances, and is very frequently overlooked, much to the detriment of the attending physician. Only a short time ago I saw a boy, four years old, apparently in the best of health, but the carefully observing mother was worried, because the child vomited every few days without any cause whatever. Not only after meals, but while eating, and whether he played or was quiet. The boy at the time had no rise of temperature, but I told the mother there was reason enough to worry, as this sometimes meant the first sign of tubercular meningitis. The family history was excellent, and what complicated



matters more, the little fellow's older brother was taken sick a few days later with measles. While I was attending him, the mother mentioned that the little fellow did not play as he used to. In the afternoon his temperature per rectum was 100.4. He never at any time complained of his head, but always about his stomach. His temperature ran irregular for about two weeks, very similar to typhoid, but he vomited every few days. After about two weeks had expired he showed some stiffness in the muscles of the neck, and a few days later became unconscious, had strabismus, and died within three days, with all the classical signs of tubercular meningitis.

Here you have the early important vomiting, which permits you to be on your guard, even before there is a pronounced sickness, and great care should be taken in making your diagnosis, for, as Hensch says, "the mother will never forgive you the gastritis, which finally went to the brain." In nurslings, of course, it is very hard to diagnose this form of vomiting, especially if, as Huebner says, it is complicated with green, slimy bowel movements; but even here in the course of a few days, the constipation which follows, will be another suspicious sign to warn the physician who thinks of digestive troubles. We have to keep our eyes open if we wish to be correct in our prognosis. This particular form of vomitings is not very characteristic; sometimes it starts in with gagging, and at other times it is projectile vomiting, especially in nurslings.

The prodromal and initial vomiting in infectious diseases, is an every-day occurrence. In these cases the infantile system does not vary much from the adult, with one exception, and that is that the number of vomiting attacks are in direct proportion to the severity of the sickness. If a child is taken with scarlet fever, and the vomiting lasts more than a day, we are compelled to think of a more serious prognosis, while in cases where the child vomits only once in the beginning, or even on the second day, or on the other hand, does not vomit at all, the prognosis is favorable. This is a very valuable symptom. It is somewhat similar, although not characteristic in the beginning, of croupous pneumonia.

Lately I have had occasion to observe two cases of erysipelas in children of three and five months respectively. In the first case, the erysipelas started from an intertrigo in the inguinal neighborhood; in the second case it started in the neck. They

both died from the same cause—a complicating peritonitis, the initial prodromal vomiting being present in both cases; toward the end they also showed the second form of vomiting—the gastro-intestinal form. The infectious form of vomiting shows itself as a very early symptom in acute forms of poliomyelitis, which in the past year we have all had opportunity to observe.

In diphtheria and severe cases of typhoid fever, vomiting gives us a very important clue in diagnosing the accompanying changes which take place in the heart muscles. Both the typhoid and diphtheria germ in their violent form, or perhaps their toxins, are dangerous to the heart, and very often produce changes which prove fatal. It is still questionable if the pneumogastric nerves participate in this destruction; but be this as it may, we have opportunities enough, even now in the time of serum treatment, to observe, either in neglected cases or cases which were not injected early enough, this peculiar form of vomiting. It appears from one to six weeks after the beginning of the disease, and associates itself with more or less severe pain in the abdomen, and in these cases you may be sure that it is of the most dangerous form. Almost always when a child complains of abdominal pains, and vomits with it, after a recovery of the throat, it will die and nothing will save it.

In older children there occurs a very interesting form of vomiting, with acetonaemia, two cases of which I myself had an opportunity to observe. A child, as a rule of good health, suddenly starts to vomit, and vomits for several days in succession, and sometimes, as the history of these cases show, for several weeks; finally the vomiting is checked and the child recovers in a short time. During this time, the child gives us a very sick impression; the face is pinched, the eyes are hollow, the tongue is dry, breathing irregular, the pulse small, abdomen soft, the skin is dry, and to look at the child you would think it to be the beginning of a diabetic coma. The thirst is terrible, but every spoonful of water taken is vomited. Extreme restlessness prevails and the child, knowing that every swallow will come up again, finally refuses everything. The urine, in one of my cases, very plainly showed large quantities of acetone, which can easily be detected with Segal's test—5 drops of a fresh 5 per cent. solution of sodium-nitroprusside are added to the urine, which is colored red; if acetone

is present, a slight addition of acetic acid changes the color to purple or violet. The attacks sometimes recur within a few months or a year, and they always effect the patient in much the same way. The etiology is not clear; some think that it is due to a uric acid diathesis, other attribute it to a disturbance in the liver, as jaundice has frequently been observed toward the end of the attack; others again think that the attacks are of a nervous character, and that the appearance of acetone in the urine is only secondary and due to the disturbance of the gastric apparatus; but it would seem to me if the latter theory were plausible, that we should be able to detect acetone in the urine oftener in other gastric diseases of childhood.

The prognosis of this form of vomiting is, taken as a whole, favorable, but Northrup cites cases in the literature where the attacks ended in death, and the autopsy showed practically nothing. If the urine in regard to acetonuria were to be studied carefully, it would be very valuable in other digestive troubles in children.

Now I would like to call your attention to another form of vomiting, which makes its appearance as soon as the children enter school, and is in all probability due to the excitement of school life in general. Mothers very frequently bring children to the physician, who on examination, find nothing especially out of order, except that the child appears somewhat anæmic, but the mother states that the child does not eat well, complains of headache, vomits occasionally while eating, sleeps very restlessly and is extremely excitable. It does not seem that this condition is due to a lack of hygienic surroundings in school, but is simply a nervous disorder which, with insufficient nourishment, gradually causes the hemoglobin of the child to become less, thus causing anæmia. The vomiting takes place mostly early in the morning, or while the child is taking its meals. By German authors this complex of symptoms is called School Disease (*vomitibus matutinis scholarium*.)

Up to the last few years there has been an uncertainty as to whether typical attacks of migraine happen in early childhood. I have had opportunity of observing a typical case of half-sided headache in a boy, seven years of age, who has had an attack every few months. They began with vomiting and general malaise, which were relieved when the boy fell asleep. The urine was absolutely negative, and on careful exam-

ination, there was nothing else to be found. Neumann, of Berlin, reports that among forty-three cases observed by himself, nine were between two and five years of age, twenty-one between six and ten years, and thirteen between eleven and fifteen years of age. In my case, neither mother nor father had at any time had periodical headaches. Other authors mention that migraine is extremely rare in children.

In 1880 Hirschsprung described two cases which he thought to be similar to a complex of symptoms described previously by Maier and Landerer, in adults, under the name of stenosis pyloricongenita. Since that time about two hundred cases have been reported, especially by Finkelstein, and what first seemed to be an entity, was later divided into congenital hypertrophic stenosis of the pylorus and pylorospasmus.

Ashby, who made a special study of this complication, published an article in the Archives of Pediatrics, in 1897, in which he states that strange to say, he finds that the Anglo-German race is particularly subject to this disease. As Pfandler states, up to 1906, there has not been a single case reported from Slavish and South European countries. It has been noticed that boys are more frequently affected than girls, and it seems that children of parents with stomach trouble are particularly subject to it. The vomiting in hypertrophic stenosis starts gradually after drinking, and lasts from one half hour to three hours. The vomited quantity is larger than the food taken by the child, and is explosive; constipation and loss of weight follow. The children refuse to drink, and the stomach is plainly visible from the outside, and the peristaltic movements can be recognized. In the second form the pylorospastic form, the vomiting is not so explosive and the whole aspect of the disease is not so alarming. Surgical treatment has been tried successfully, and has a future, and even with medical treatment the prognosis is not as dangerous as would be imagined.

Among the dozen popular symptoms produced by worms, the stomach also gets its share, but there is not doubt that *ascaris lumbricoides*, through direct migration into the stomach causes vomiting, and that the tape worm through reflex, causes sickness of the stomach and vomiting. *Ascaris* is frequently vomited up, and then of course the vomiting is easily explained. It is impossible to diagnose vomiting caused from the tape worm, excepting by the passage of parts of the worm in the feces.



In looking over these different forms of vomiting in their manifold appearances, and in, as it seems, almost diametrically opposed diseases, it would seem impossible to diagnose each form for itself, and we probably would not be able to come to a conclusion, if it were not for the fact that almost in every case, symptoms in connection with the vomiting make a diagnosis possible. We at one time directed our attention altogether too much as to whether the vomiting took place while the stomach was empty, or if it followed taking nourishment, whether it was explosive or with little force, whether it happened when the body was in a vertical or a horizontal position. All this is not so important, and would not materially help us make a diagnosis, if it were not for the other additional symptoms, but of one thing we are certain, and that is that vomiting itself always means a disturbance of great importance, and that it sometimes is the beginning of an irreparable destruction of infantile organs.

A child very often is unable to assist the physician in arriving at a correct diagnosis, and therefore a sign which we know appears in certain diseases, is of the greatest importance. The fact that vomiting is more frequent in childhood than in adults, other things being equal, is a valuable knowledge in itself, and the presence or absence of this symptom must guide us in a good many cases, where symptoms are scarce and where diagnosis and especially an early diagnosis is a desirable factor. Whatever science may accomplish in the future to enlarge the diagnostic sphere in the special field of pediatrics, the value of the symptom on which I have made these few remarks will without any doubt be one of the foremost ones to be considered.

#### DISCUSSION.

**Dr. Henry L. Coit, Newark,** said that to come before a Society so distinguished for the character of its members would lead him to try to distinguish himself also, so that the Society and himself would compliment each other. He wished first to commend the courage of Dr. Stern in bringing before the Society such a trite subject as vomiting, because such a commonplace subject certainly would require courage to write a scientific paper upon. This, however, he said, is the sort of paper that is most useful in daily practice and for the benefit of the general practitioner. It seems to be the tendency to ascribe all manifestations of disease to remote causes; and the research laboratory is too often depended upon to answer all questions of clinical importance. It would therefore seem somewhat bold in any man to reason from premises that have their origin at the bedside. It is not right that all medical knowledge should emanate from the

research laboratory or the experiment station, he therefore considered the present subject both practical and valuable.

The importance of such a symptom as vomiting has been magnified, and incorrect diagnoses have often been made from it, because of the tendency on the part of most physicians to peruse some striking article on a disease or its symptoms, and then proceed to locate that disease among some of his patients. This is an unfortunate tendency, and Dr. Coit wanted to call attention to three classes of disease in which vomiting is a common symptom.

Cyclic or recurrent vomiting is a newly described disease. While there is such a thing, he did not think that it is so frequent as one is apt to believe. It is a neurotoxic habit, and is chronic. He had seen cases in which the diagnosis of recurrent vomiting had been made, but in which a good dose of calomel with a regulated diet, and possibly some subsequent intestinal antiseptics or treatment antagonizing intestinal putrefaction, has cleared up the condition, no recurrences taking place. In true cyclic vomiting there was a toxemia and some absorption from the intestines; and on investigation, the urine was found to contain evidences of indican. The tendency to call other things cyclic vomiting should be combated.

Congenital pyloric stenosis is a term that one is too apt to apply to persistent vomiting in infants. As the reader of the paper had indicated, since the original paper on the subject appeared, there had been a division in the classification; and with this has been grouped another disease known as pyloric spasm. Many cases supposed to be suitable for operation, because they are believed to be cases of congenital pyloric stenosis, have been caused primarily by the use of boric acid mouth washing in young infants. He considered it bad practice on the part of the accoucheur or the pediatricist to wash the baby's mouth with saturated solution of boric acid. The nurse uses the boric acid solution on the nipples also, and the child swallows it every time it sucks or its mouth is washed. The boric acid in these cases certainly neutralizes the rennin in the infant's stomach, and interferes with the digestion of the soft protein of mothers' milk, and curds are found in the stools as the result of this. Eliminate boric acid and you will be rid of many so-called cases of pyloric stenosis in infants.

Another class of diseases in which vomiting is the principal symptom is anorexia nervosa. This is treated expectantly, and never cured; but if eating is not forced, as is too common, the mother is sent to the country, and the baby is left with a nurse with order in her will, the cure is often obtained. Dr. Coit said that he wanted to emphasize this one point, and would then stop; although he had a classification that he would like to have presented. Vomiting is a symptom of so many diseases that it has very little diagnostic value isolated from other symptoms; but added to some other distinguishing characteristic of the disease, as in the cerebral vomiting referred to by Dr. Stern, it is of great importance. If there is projectile vomiting, early and persistent, without nausea, this would seem an important symptom when added to stupor, sighing and slow pulse.

**Dr. J. P. Reilly, Elizabeth.**—In adults we have the objective, subjective, physical and the chemical means to aid in diagnosis; but in chil-

dren, one or more of these, in whole or in part is almost always wanting. If the members should carry away from the meeting nothing else but the stimulation for better observation along this line, they would be repaid for attending it. The subject has been greatly neglected in the past, and Dr. Reilly said that he would mention only the class of cases in children in which there are periodical attacks of vomiting, but in which no definite lesion is discovered.

If, on close observation during one of these attacks, the hand be placed over McBurney's point, the physician doing this will gain the reputation of being able to diagnose appendicitis in children. This, Dr. Reilly said, is one of the important matters concerning the study of vomiting in children.

**Dr. P. DuBois Bunting, of Elizabeth,** said that the title alone suggests the progress and importance of Pediatrics, Progress. Twenty-five years ago the only instruction the student at school received was a few remarks by the Professor in Medicine or Obstetrics. Now each college has a chair of Diseases of Children. There are National, State and City Pediatric Societies and eight text books by American authors, etc.

Importance: It can no longer be said a certain disease, as cancer, is increasing without first considering the saving in child life. During the past eighteen years the mortality in children under five years in New York City has decreased from 1,160 to 620 per 100,000 of population, showing a saving of 12,000 lives annually in that city.

How well vomiting can be understood and systematized is clearly shown by the paper and chart. It remains for the physician to be careful in the history taking and his observations of the case.

**Dr. D. E. English, Millburn.**—When we see a child with a history of chill, fever and vomiting, one of the first things we think of is scarlet fever. Dr. C. G. Kerley, of New York, in a paper read this year in Chicago, before the American Medical Association, gave a resume of 515 cases of scarlet fever. In these cases less than 50 per cent had initial vomiting. This agrees with my own experience. Most cases of indigestion are due to too frequent feeding. Dr. Jacobi found, on examining a large number of infants two hours after feeding, that a large majority had food remaining in the stomach. The infant should not be fed until its stomach is empty, and not until it has been empty long enough to get rested and contracted. Dr. English believed, also, that many cases of so-called cyclic vomiting were simply migraine in the infant. He had watched two patients with so-called cyclic vomiting grow up, one being 14, the other 10 years of age. Instead of vomiting, as they grew older they began to have periodic headaches, just as both their fathers suffered from. In giving calomel for indigestion in infants he has ceased combining it with sodium bicarbonate. Instead, he gives one full dose of calomel alone, as taught by Dr. Coit, with a much better effect. He has also followed the suggestion of Dr. Coit in keeping boric acid out of the baby's mouth, and has almost abolished it from the nursery entirely, with gratifying results.

**Dr. N. L. Wilson, Elizabeth,** said that he wished to speak regarding vomiting in children afflicted with adenoids, of which Dr. Stern had spoken. Dr. Wilson had noticed that in the last column of the table this is referred to at length

and he believed that most of these cases were due to the vitiated and increased secretion going down the back of the pharynx, rather than to the real presence of the adenoid or the hypertrophied tonsil. When these conditions are removed, the vomiting ceases, because the secretion then becomes healthy.

## THE ETIOLOGY AND GENERAL BACTERIOLOGY OF TYPHOID FEVER.\*

By **F. S. Hammond, M. D., Trenton, N. J.**

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In a study of the etiology of typhoid fever it is not the mere enumeration of the predisposing factors common to infectious diseases in general, or even a detailed study of those which seem to assume an important role in this connection, which should receive the first attention.

In the continuance and spread of typhoid fever are concerned the primary underlying principles of the clinical history of the disease, and the life history of its specific organism, both within the human body and during its saprophytic existence. From being considered as a comparatively frank and simple disease with certain well marked and distinguishing features, typhoid fever in a broad sense, under modern methods of investigation, has been found to be an extremely broad and complicated subject, requiring for its solution the best efforts of clinical medicine and biological science.

Typhoid fever is not simply an infection; it is in all cases a true *septicemia*, and its specific organism not only is present in the intestinal tract and discharges therefrom, but the circulating blood, and from this may reach and colonize in any organ of the body from prodromal stage to convalescence. The rose spots of the skin, the gall bladder, the urinary bladder, the middle ear, the testicle, the bronchi, the spleen and lymph-nodes, and the various bones of the body all form suitable locations for its growth and multiplication.

It has been repeatedly found in the circulating blood as early as the fourth day of the disease, and Kayser found it in 100 per cent. of the cases he examined during the first week. Pratt, of Boston, in a single autopsy, isolated typhoid bacilli from the

\*Read before the Post Graduate Section of the Mercer County Medical Society, May 12 1908.



heart's blood, the spleen, the liver, the kidney, a mesenteric lymphnode, the gall bladder, the urinary bladder, the right middle ear and the bone marrow. By the same worker it was isolated from the gall bladder twenty-one times out of thirty examinations. Fox found localization of typhoid bacilli in the testicle of 46 per cent. of cases examined. It was isolated from the urine in 25 per cent. of all cases examined by Jacobi and Munch. Gwynn estimated that 500,000,000 typhoid bacilli per cc. were present in a case he reported. It is frequently found in the sputum when bronchitis is associated, and Deudonne recovered typhoid bacilli from the sputum seven weeks after fever had disappeared.

While the intestinal discharges are the principle means by which typhoid bacilli leave the body, the intestinal changes in typhoid fever are regarded by many as merely co-ordinate with the general infection, and Baumgarten stated the belief that intestinal lesions should be regarded merely as metastasis. Undoubted cases of typhoid fever without intestinal lesions occur, and conversely severe typhoid ulceration of the intestines has been observed without any disturbance of health. Typhoid fever then is a general infection in which local changes can occur.

Not only is it a true septicemia, but it is one manifesting itself in such manifold phases, and with such varying degrees of severity that if characteristic symptoms only are sought for, its presence must frequently be undetected, and what is of far more importance, the infectious and contagious nature of the condition will remain unrecognized, and it is to this feature of typhoid infections that the persistence and prevalence of the disease is largely due.

The introduction of improved methods of diagnosis has resulted in treating as cases of typhoid infection in a sanitary sense, a great portion of febrile diseases in which previously no precautions were taken. It is of interest to note that while formerly in many cities the number of recorded deaths due to all continued fevers not considered typhoid, and those from typhoid fever reported as such were about equal, during the past eight years there has been a gradual but steady decrease in the former, and a corresponding increase in the latter. For example, in St. Louis previous to 1900 the number of deaths from all fevers, not typhoid, were in excess of those due to that disease. In 1900 at the time when the Widal reaction was coming into general use,

a special circular was sent by the health board of that city to general practitioners requesting that all cases in any way resembling typhoid be carefully investigated. The results were striking. In 1899 the deaths from typhoid were one hundred and thirty-one, and from other fevers one hundred and forty-eight; in 1901 the typhoid figures rose to one hundred and ninety-eight, and the others decreased to eighty; in 1902 the rate was two hundred and twenty-two to one hundred and two, and in 1903 two hundred and eighty-eight to ninety-one. The difference in the previous and subsequent figures represents exactly the decrease in the opportunities for typhoid dissemination in that city.

At present, however, while it is not the cases sufficiently severe to cause death in which errors in diagnosis and consequent opportunity for spread of infection are so likely to occur, the same opportunity frequently does occur in that great number of atypical conditions accompanied by transient fever, and vague general and local complaints that clinically are regarded as "touches of malaria," intestinal toxemia, etc., and which are in reality different manifestations of typhoid infection and septicemia.

Since the discovery of individuals, apparently normal, who have never manifested a single symptom of ill health and who yet harbor the bacilli in enormous numbers, it is manifest that the symptoms of typhoid infection may range from those of classical type down through all the vague complaints to which the body is subject, to nothing. The typhoid bacillus, while always ready to infect, frequently does not cause typhoid symptoms.

From a standpoint of etiology and prophylaxis the term *typhoid fever* is a misnomer, and the condition is better described as *typhoid infection*. For the diagnosis of this in all its forms no single symptom or train of symptoms will suffice, and it is to be made only with the aid of the best bacteriological and laboratory methods.

Bates, of the Panama Service, in analyzing two hundred consecutive cases treated in the Ancon Hospital, in which a diagnosis of typhoid fever was ultimately confirmed, found that 32 per cent. were decidedly atypical, many manifesting only slight fever and malaise for a few days, and others with total absence of abdominal signs, and it is to these and one other type of typhoid condition that the actual continuance of the disease is largely due. They do not re-

semble typhoid fever, they are not recognized as typhoid fever, and are not reported as such; prophylaxis and sanitation are consequently not carried out, and there is but one possible result—contact infection and general dissemination.

While the frequency and importance of contact infection, both direct and indirect, can no longer be doubted, and is receiving constantly more attention, it is not sufficiently appreciated. That an individual suffering from typhoid infection in any form, with symptoms or without, at any stage, as well as any article with which he has the slightest contact is a virulent focus of infection and a real and eminent danger to every person directly or indirectly associated with him, is a factor which cannot be underestimated, and which should be considered as the underlying principle in the general etiology of the disease. For whatever the mode of entrance is, and no matter what the carrier may be—water, milk, food, flies, or contact—every case of typhoid fever either directly or indirectly results from a previous infection in which adequate prophylaxis was not instituted, and this occurs not only in unrecognized cases, but far too frequently after a correct diagnosis has been made. In the investigation of typhoid fever in Washington in 1906 the United States Public Health and Marine Hospital Service in the official report, states, in regard to prophylaxis: "Of the four hundred and ninety-two cases treated at private residences the treatment of stools and urine with disinfectants was efficient in one hundred and forty-five cases, inefficient for 286, and of doubtful efficiency for fifty-one. Of the two hundred and eight-six patients whose stools and urine were inefficiently treated the lack of efficiency was due to the small quantity of disinfectants used for one hundred and ninety-seven, and to shortness of time of exposure for eighty-nine. In the fifty-one cases of doubtful efficiency this was because the material used was some patented preparation, the value of which as a disinfectant is doubtful. In eighty-nine cases no attempt whatever at disinfection of excreta was made." All of these cases at private residences were under the care of reputable physicians and one hundred and nineteen were attended by professional nurses, and yet in almost 75 per cent. the most common and important prophylactic measure was either totally neglected or inadequate, and while not supported by actual investigation, it is probably not incorrect to presume that

in this respect Washington is fairly representative of at least a large number of other cities, while in rural districts neglect is fully as great, if not greater than in cities, as the epidemics of Lowell, Ithaca and Butler can testify.

Not only at the height of the disease is a case of typhoid fever a source of infection, but during the early days as well. According to Conradi, who based his conclusions on an extensive study of contact infections, not only is the infection transmitted most often during the earliest stages of the disease—before its true nature has been recognized—but it frequently takes place during the incubation period. That the bacilli may remain long after convalescence is now well known.

In addition to the clinical types of the disease, however, both frank and obscure, there is yet another source of initial spread of infection, which from being infinitely more difficult to detect may remain for years a constant menace without an indication of its nature. The fact that persons in average health might harbor the cholera spirillum in their intestinal tracts or the diphtheria bacillus in their throat has been known and its importance in prophylaxis appreciated for some years; but it is only recently since the suspicion that a similar relationship might exist in the case of man and the typhoid bacillus has actually been confirmed. It has been found that persons apparently well may discharge typhoid bacilli in the urine and feces months and even years after passing through an attack of the disease, and that persons who have never shown a symptom of illness, but who have been associated with cases of typhoid fever, may become carriers of the bacillus in a similar manner.

One of the earlier instances of chronic carriers, reported in 1899, was that of a patient who five years previously had been treated for typhoid fever in the Johns Hopkins Hospital, returned suffering from a cystitis, which on investigation was found to be due to the typhoid bacillus in almost pure culture. Since then many similar cases of chronic typhoid bacilluria have been noted. It is, however, in the feces that the so-called carriers most frequently discharge the bacilli. In 1906 Leibtrau reported an instance in which frequent cases of typhoid occurred in new comers at a mill at different times since 1896. In 1905, because of several deaths, an investigation was made in which it was discovered that one of the permanent residents at the mill



was discharging typhoid bacilli in his urine and feces in almost pure culture. Kayser reports three instances of bacillus carriers investigated by him; two resulted in milk epidemics which were traced to the presence of persons at the dairies who were discharging the bacilli in their feces after unrecognized attacks of the disease. The third case was that of a woman, forty years of age, who at the age of ten had had typhoid fever. In 1904, thirty years after the attack, fecal examination showed the presence of large numbers of typhoid bacilli. Lentz mentions a case in which the bacilli persisted for even a longer period of time—forty-two years.

It is not only in those who have had the disease that the typhoid bacillus has been found to persist, but persons who have never been ill may carry it for years in a similar manner. In 1902 Drigalski and Conradi isolated the typhoid bacillus from the stools of four persons who had showed no symptoms of any kind, but who had been in close contact with cases of typhoid fever. Liebrau, in 1906, reported the case of a woman, an attendant in a prison, who was found discharging typhoid bacilli in the feces two years after having nursed two cases of the disease. She was well and had never been sick. The occurrence of typhoid in inmates who had been there so long that they could not have acquired their infection outside led to her discovery and isolation, after which no more cases appeared.

While the source of bacilli in the feces of carriers has been the subject of considerable discussion, the results of a number of recent investigations tend to show that it is not as formerly supposed the intestine from which they principally originate, but the gall bladder. This organ offers a favorable location for the persistence and multiplication of the organism both in chronic carriers and the usual clinical type of the disease. Not only is the bacillus found in the bile at autopsy, but it has been proven that after injecting typhoid bacilli into the circulation of a rabbit they may be recovered from the gall bladder in so short a time as eight hours. In the gall bladder the typhoid bacilli may give rise to no symptoms, or, as frequently occurs, be the cause of cholecystitis and gall stones. Neiter and Leifman, in 1906, found at autopsy the gall bladder of a chronic carrier filled with calculi and the seat of a growth of typhoid bacilli in pure culture. In an instance reported by Leibetran, the carrier, a woman,

had suffered with attacks of jaundice and gall stone colic ever since having typhoid fever.

While the frequency with which bacillus carriers occur is not definitely known, it has been variously estimated by different observers. At the typhoid observation station at Idar, Lentz found that 4 per cent. of all cases became carriers, and the average results of Lentz, Klinger and Drigalski in investigation of one thousand seven hundred and eighty-two cases gives a total of fifty-three cases, or a frequency of about 3 per cent. If this estimate is approximately correct, then in the United States, where about 300,000 cases of typhoid fever occur each year, there will be in that time between 8,000 and 9,000 additional bacillus carriers at large, and when it is recollected that many of these individuals may be daily in close association with any of the common food supplies, it is obvious that opportunities for epidemics as well as isolated cases from this source are not lacking. In themselves then, the initial sources of typhoid dissemination are not obscure.

Typhoid fever as a disease results from a lack of prophylaxis in cases of typhoid infection. This occurs in three ways:

First, from non-recognition of certain mild or atypical forms of the disease; second, from failure to properly isolate and disinfect after the diagnosis is made; third, bacillus carriers.

But, while the manifestations and history of the typhoid bacillus in the body and the manner in which it is discharged therefrom are of the first importance, the means of its dissemination are hardly less so. Although the typhoid bacillus belongs strictly to the parasitic class, it is nevertheless capable of a more or less prolonged saprophytic existence in any article commonly used by man, and on this period of viability depend the possibilities of time, distance and circumstances under which typhoid infection will occur.

The viability of the typhoid bacillus under almost every conceivable condition in every medium from distilled water in the laboratory to growing crops in the field has been a subject of study for bacteriologists and sanitarians ever since its discovery in 1880, and, while the results have been of the greatest interest and importance, for practical purposes much of this problem remains as yet unsolved.

Of all the natural media studied in this connection, drinking water, from which as a carrier of infection by far the greatest

number of all typhoid epidemics arise, has naturally received the greatest amount of attention, and various observers have sought by isolation from natural waters, direct bacteriological experiments and epidemiological studies to demonstrate the presence and determine the longevity of the bacillus in this medium under condition as naturally occur in various types of water supplies.

The typhoid bacillus, from the relatively small numbers in which it occurs in any limited amount and its almost constant association with large numbers of intestinal bacteria which mask its presence on laboratory media, is an extremely difficult organism to isolate from natural waters, and the instances where the presence of typhoid bacilli in water supplies has actually been demonstrated are extremely few. Wilson, in 1905, after investigating the literature, was able to collect but six authentic reports in which isolation, and complete proof of identity, were obtained. All the instances occurred in Europe; four isolations were from shallow wells, and two from public supplies. In no less than three the contamination was supposedly from urine, for which reason isolation was obviously less difficult. For the purpose of deciding the frequency of water borne typhoid infection however, epidemiological evidence is entirely adequate, and it is estimated that about two-thirds of all typhoid epidemics result from infected water.

The fact that the typhoid bacillus is a parasitic organism, requiring for its growth and multiplication, organic matter in a comparatively concentrated form, and that many of the bacteria present in natural waters exert a distinct inhibitory and deleterious effect upon it, would naturally lead to the conclusion that in general the period of life of the typhoid bacillus in drinking water would not be great, and while a great majority of laboratory experiments performed under highly artificial conditions are valueless from a practical standpoint, those reported by Jordan, Russell and Zeit, in 1904 and 1906, are more rational and seem not only to confirm this belief, but to indicate that the period of longevity is inversely proportional to the organic and bacterial content of the particular water.

The observers mentioned in seven series of experiments placed typhoid bacilli in permeable sacs, such as to allow free ingress of surrounding fluids and at the same time prevent escape of the organisms contained in them. The sacs were suspended

in various natural waters and the contents examined at intervals for typhoid bacilli. In the sacs suspended in the comparatively pure tap water from Lake Michigan the bacilli were found alive after seven days, but not later. In a similar lake water they lived ten days. In the heavily polluted water of the Chicago and Illinois rivers they were not found after three or four days, and in the Chicago drainage canal, practically an open sewer, none lived longer than two days. These experiments while apparently closely fulfilling natural conditions in water under which typhoid bacilli rapidly disappear, are in themselves not entirely exempt from criticism, and the results of investigations in many instances of water borne infection are equally convincing that under other natural conditions to which drinking water is subject the typhoid bacillus may remain alive and virulent for a considerable period of time.

An instance of its persistence in well water was reported by Kubler and Neufeld, who in 1898 isolated *B. typhosus* from a well which had been contaminated by washings from a chamber used by a typhoid patient. Four weeks later they again isolated an identically similar organism and as fresh infection in the interval was excluded they conclude that in the often occurring combination of soil and water the bacillus may remain viable for at least four weeks. Tavel cites a case where apparently the water of a public supply became infected in the pipes from negative pressure and remained infective for several months.

In a single house supplied by a private pipe arising twenty inches from the end of the main, typhoid cases recurred long after an epidemic which had visited the town had subsided. This continued from October to April, seven cases in all occurring. At this time the blind end was exposed and found filled with slimy water, a sample of which was sent to the laboratory, where *B. typhosus* was found and identified. In this instance typhoid bacilli had apparently persisted and remained virulent in a public supply for five months.

The fate of typhoid bacilli in public water supplies is naturally a question of great importance, not only from a scientific standpoint, but economically as well, for on this is based, partially at least, the principles of water purification in which the problems of time, distance and natural purification of streams largely enter.

According to Sedgwick the longest well established distance which typhoid germs



are known to have traveled to cause infection of water supplies is fifty-seven miles—in the case of the Detroit epidemic of 1892. The greatest assumed journey—one hundred and thirteen miles—from Oil City to Pittsburg. The same authority states, however, that distance is a secondary consideration and no limit can be placed on this if the rate of travel is fast enough. In other words, it is a question of time alone, and examples of the influence of this factor are seen in numerous epidemics; in Lawrence, Mass., a water borne epidemic occurred after the water had been subjected to the purifying influence of a storage reservoir for one week. In 1892 an epidemic at Detroit resulted from the dredging of old sewage deposits from the bottom of the Black River at a distance above the city requiring ten days for passage. A water borne epidemic of over 1,000 cases in Grand Forks, Minn., was caused by the removal of accumulated sewage several months old from the pipes of a city sixty miles above. At Covington, Ky., the water of the Ohio River, more or less polluted, is kept in storage basins at times as long as thirty days, and yet the city suffers severely from typhoid fever, due apparently to infected water.

These and numerous other instances point quite plainly to the fact that while bacteriological experiments may indicate that the majority of typhoid organisms quickly perish in water, it is impossible by any means yet devised to predict with certainty at what time an infected natural water will become safe for human consumption under the innumerable combinations of circumstances and conditions to which such water is prone. And it is obvious that whether the longevity of the typhoid bacillus be small or great, as long as the streams from which raw drinking water is obtained continue to be the common carriers of accumulated wastes of the communities along their course, which are acting merely as relay stations to myriad generations of typhoid bacilli in their progress from source to outlet, typhoid fever will continue to be a water borne disease.

The remedy for the condition, however, lies not so much in the prevention of all contamination of water supplies—an obvious impossibility, but in the purification of the water prior to use. Investigation has shown that a large number of the water borne epidemics would have occurred even if the streams in question had been protected from the controllable gross contam-

ination of city sewers. The epidemics of Plymouth, Ithaca, Lowell and Butler, in each of which over 1,000 cases resulted from a single case in an isolated house, above the intake of the city supplies, are typical examples of this. Moreover, while the result of concentrated infection borne over a short distance is well understood, very little is known about the effect on a community of a small amount of infection carried for greater distances. In other words, a town or city having an untreated water supply from which all proximate infection has been excluded may still suffer from typhoid fever due to a far distant and much diluted infection in such a manner that the infective agent will remain undetected.

It is not known how many typhoid bacilli are necessary to produce the disease, and as advanced by Rosenau, while a much diluted and attenuated infection may not have the power of directly causing the disease, occasional typhoid bacilli taken in water may for a time remain latent, and give rise only to apparently sporadic cases of the disease, when the infected individuals are subjected to some depressing influence. In other words, this is a possible cause of bacillus carriers.

While it is not the purpose of this paper to discuss the different methods of water purification, the efficiency and results obtained in the use of combined storage and sand filtration plainly indicate that at least as far as infection conveyed by public water supplies is concerned, typhoid fever is indeed a preventable disease.

From water itself as an infective agent, a consideration of its natural combinations naturally leads, under many of our public sanitary systems, to a study of the persistence of typhoid bacilli in sewage, feces, dirt, mud, dust, ice, oysters and cadavers, any or all of which may have a more or less intimate association with certain types of public supplies. The frequent failure to cultivate *B. typhosus* from the feces in undoubted cases of typhoid fever has led a number of observers to believe that not only were the intestinal lesions not the chief source of the bacilli, but that they occurred in the feces in large numbers much less frequently than commonly supposed.

Lentz and Tietz in the examination of two hundred and five typhoid stools were able to isolate the bacillus in but 75 per cent., while others have found it as low as 2 per cent. But, while undoubtedly there are instances in which the bacilli may be absent or

in very small numbers only, the many difficulties in isolation would suggest that negative results be received with caution and typhoid stools be regarded practically as always infective.

In feces and sewage the typhoid bacillus does not find a favorable environment, and in general the close association with enormous numbers of intestinal bacteria and their products cause its rapid disappearance. Park states that it is unusual to isolate typhoid bacilli from feces if more than six hours have elapsed before examination. MacConkey (1902), investigating the longevity of the typhoid bacillus in sewage, found that in the raw unfiltered product it did not live after thirteen days, and in one series of experiments it could not be found on the sixth day or later. On the other hand, the coating of mucus or albuminous material received from the intestinal contents may act as a protecting envelope in an environment, such as water.

An interesting instance was reported by Levy and Kayser in 1903. The stools of a typhoid patient were placed in a cemented vault between September 8th and 13th, 1901; as the patient was then removed to another locality for treatment it is presumed that no further infection of the vault occurred. The contents of the vault were removed and placed on garden earth as manure on February 6, 1902. When this became known the local physicians took specimens of the soil in which the feces had lain and sent them to the laboratory for examination, where *B. typhosus* was recovered from them. In this instance the organism had persisted in feces, or feces and soil together for at least five months, with a temperature ranging from below 0 to 11° C.

The results of practically all experiments performed with soil indicate that in this most frequent receptacle of infection typhoid bacilli are capable of prolonged existence.

Firth and Horrocks, in 1902, reported a number of elaborate experiments in which natural conditions were closely followed. Inoculating the soil with an emulsion of typhoid bacilli and keeping it moist with rain water they were able to recover the bacillus up to the sixty-seventh day, and up to the fifty-fifth day even when the ground had been frozen a part of the time. Using the soil from around a drain and moistening it with raw sewage, the organism was recovered after sixty-five days, although the ground had been frozen for several days. In dried soil the bacillus did not persist

as long as in moist, but they lived twenty-five days after the completion of the drying to such a consistency as to be blown about as dust. Harrison and Harrison, in India, showed that in absolutely dry dust the bacillus lived over four and one-half days, and for three days when exposed to sunlight.

The viability of the organism in soil and dust is closely related to water borne infection. Typhoid excreta deposited on the banks or in the vicinity of streams, may be infect the soil that it remains infective until such time when by rain or thaw the infection is washed into a water course from which a public supply is obtained, as occurred in the well known epidemic of Plymouth.

Investigating the longevity of typhoid bacilli in cadavers, Loesner working with the bodies of pigs, placed the spleen of a typhoid patient in the cadaver, which was wrapped in cloth, enclosed in a wooden box and buried to a depth of five feet. In this instance he found the bacillus after ninety-six days, but noted no tendency to infect the surrounding soil.

As is well known, typhoid bacilli are resistant to freezing, and the part played by ice in the causation of disease is naturally of both interest and importance. But, while there are a number of isolated instances of seemingly authentic ice infection, of which that of the St. Lawrence State Hospital is an example, these are comparatively few, and Sedgwick and Winslow after reviewing the literature, express the opinion that no epidemic of typhoid fever has ever been satisfactorily traced to such a source. These observers further state that, as a result of their own series of quantitative experiments, they consider the outlook on this subject decidedly reassuring, and that under the general condition of collecting, handling, storing and consuming both natural and artificial ice, typhoid infection from this source can but infrequently occur. They found that not only was there a reduction of 99 per cent. of the typhoid bacilli during artificial freezing, but state that under natural conditions the mere physical phenomenon of that process causes a casting out of 90 per cent. of all the organisms originally present in the water. And for the reason that the pathogenic germs in the most highly polluted stream are comparatively few, the probability of any remaining in the ice is small. The long period of time moreover, usually elapsing between collection and consumption, is a strong fac-



tor in the disappearance of contained organisms. Park found that at the end of four weeks the percentage of reduction of typhoid bacilli in ice was 99.996, and reached completion in six weeks. The chief danger from this mode of infection undoubtedly lies in the early use of a highly infected product, such as might be due to extreme carelessness in the manufacture of artificial ice or the harvesting of natural ice from a grossly polluted water.

In addition to ice as an indirect mode of water borne infection there arises the subject of shell fish, among which of chief importance are oysters. It has been estimated that a yearly crop of these along the Atlantic and Gulf coasts amounts to over 25,000,000 bushels, and with the degree of sewage pollution to which their natural environment is subjected the frequency of typhoid infection from this source is readily appreciated. If by some happy chance the oysters escape contamination in their home waters this oversight is quickly remedied by the highly interesting manner in which they are fattened for market. Apparently the most efficacious being to plant them in water in proximity to a sewage outlet. In the words of the dealer: "The dirtier the water, the fatter the oyster." That sewage contamination of this variety of food is common and frequent was positively demonstrated by a series of experiments performed in the bacteriological laboratory of the Boston Board of Health in 1906. In clams obtained directly from the beds in the vicinity of Boston Harbor or bought in the open market sewage organisms were found in from 60 to 100 per cent. in the different lots examined. Not only must typhoid bacilli frequently be injected by oysters and clams, but they are capable of surviving therein for considerable periods of time. Foote found that in oysters inoculated and kept at 50 and 60° F., typhoid organisms lived for twenty-eight days in the shell juice and eight days in the stomach.

Complete sterilization of shell fish is supposedly accomplished by the various processes of cooking, but that such is not always the case was conclusively shown by the cooking experiments of the Boston Board of Health in 1906. In these, oysters, clams and lobsters known to be contaminated were subjected to a number of methods of preparation, and the reduction in sewage organisms noted when the articles were subjected to varying degrees of heat for different intervals. It was found that par-

ticularly in steamed clams and roasted oysters complete destruction of sewage organisms was by no means accomplished within the time and with the degree of heat required in these processes, and that a number may even survive the time and heat frequently employed in restaurants for the preparation of oysters and clams in the form of stews, and while sewage organisms are slightly more resistant to heat than typhoid bacilli, these experiments indicate the possibility of infection from this food after cooking as well as when raw.

It is in connection with indirect contact infection that the viability of typhoid bacilli on various fabrics demands attention, and that this may be the means of dissemination is shown by the case cited by Parkes in 1903. Some blankets last used in military services in South Africa were sold under emergency without being cleaned, a number going to a training ship. An outbreak of typhoid fever occurring soon after on the ship, a number of the blankets were sent for examination to Klein, who found *B. typhosus* present on them. The period of time between the previous use of the blankets and the finding the bacillus was about six months.

Firth and Horrocks found the organisms to survive seventy-four days on khaki and eighty-seven days on blue serge, when these were inoculated with emulsions of bacilli; when inoculated with typhoid stools the bacilli lived seventeen days. It is not, however, in the long survival of the bacillus that the chief danger from this source arises. But rather in immediate contamination of the hands and clothing of those handling the bedding or similar articles in contact with typhoid patients. This is undoubtedly a frequent means of infection, not only to those in immediate contact, but in turn to those with whom they associate.

That various insects, the chief offender among which is the house fly, should find food and human excreta equally desirable as feeding places is not only a regrettable fact from an esthetic standpoint, but a serious one in the spread of disease in general, and typhoid fever in particular. From excreta to flies and from flies to food is a cycle in the life of the bacillus from which typhoid fever richly deserves its title of a filth disease. In fact, it is only under conditions in which the most ordinary sanitary precautions are for some reason neglected that any considerable opportunity for fly infection occurs; as, for example, the surface leakage from defective sewers and expos-

ure of excreta from typhoid patients. In this manner military camps most frequently offer the conditions necessary for this form of infection. In his report on typhoid fever in camps during the Spanish-American War, Dr. V. C. Vaughn says: "Flies swarmed over infected fecal matter in the pits, and then visited and fed upon the food prepared for the soldiers in the mess tents. In some instances where lime had recently been sprinkled over the contents of the pits, flies with their feet whitened with lime were seen walking over the food." Direct evidence of this means of infection is given by Hamilton, who demonstrated the presence of typhoid bacilli on the bodies of flies who had visited a sewer in an infected neighborhood. Ficker found the bacillus capable of living for at least twenty-three days on the bodies of flies artificially infected.

Prophylaxis against fly infection, however, is certainly neither complicated or obscure; for while food is a first necessity, and typhoid dejecta must be handled, and flies we will always have, still a union of the three must only result from a total lack of the most ordinary precautions, in other words, common cleanliness.

As an example of typhoid infection through other parasites, the helminthitic theory, originating recently in France, deserves brief attention. This theory, the principle supporter of which is Guiart, ascribes the role of inoculating agent in typhoid fever, cholera and other intestinal diseases, to intestinal worms, chief of which in typhoid fever is the whip worm (*trichuris trichiuria*). The whoop is based on the high percentage of whip worms found in typhoid cases by some investigators, and upon the fact that intestinal worms may wound the mucosa. It is assumed that the uninjured mucosa forms an impassible barrier to the bacteria which, however, may pass through these wounds. The theory claims that typhoid bacilli in the intestines are harmless unless parasitic worms are present as wounding agents. While some evidence appears to favor the supposition that intestinal worms may act as described, very little has been adduced to show that this is of any serious import in the etiology of typhoid fever.

Stiles, who examined the stools of two hundred typhoid patients in Washington, D. C., in 1906, found that 92.5 per cent. of these showed no infection with intestinal worms, and but 7 per cent. showed whip worm infection, an increase of but 1.32 per

cent. over the general frequency of whip worm infection. These findings fail in every way to support the theory, and much direct evidence is needed in order that it be generally accepted as having any decided bearing on the subject.

The last, but far from least important problem in the etiology of typhoid fever and over which control is gradually being assured against almost insurmountable difficulties, is the milk question. It is unnecessary to here emphasize the obvious suitability of milk as a culture medium; but that this most widely used article, which is in every way best adapted to bacterial growth and multiplication, should be liable to typhoid infection from almost every recognized source in every known way in which such infection is transferable, is a circumstance which places milk second only to water as a means by which the disease is spread.

While it is impossible to arrive at a precise conclusion as to the total percentage of all typhoid infections due to milk, various epidemiological statistics place it as the second most frequent cause. Schuder, who collected the reports of six hundred and fifty epidemics, found that four hundred and sixty-two were spread by water, one hundred and ten by milk and seventy-eight by all other means. Raudnitz, of Prague, states that one-fourth of the epidemics of typhoid fever in Austria are due to contaminated milk. Crae, after an inquiry into the causation of six hundred and thirty-eight epidemics, found that in 17 per cent. the infection was conveyed by milk. In Washington, D. C., during 1906, the United States Public Health and Marine Hospital Service, after an investigation of eight hundred and sixty-six cases of typhoid, reported that 10 per cent. of all cases, or one-third of those in which a cause could be definitely assigned, originated in various milk supplies.

The frequency of this mode of infection is necessarily great, both from the nature of the product and the manner in which it is handled and consumed. From the time of leaving the cow till it reaches the consumer, milk is liable to contamination with any and all forms of dirt; from the air, from flies and insects, the hands and clothing of farmers, dairymen, middlemen, dealers and drivers; from the vessels in which it is contained, from other milk with which it is mixed and the water with which it is diluted. Not only is every means thus offered for the entrance of bacteria into market milk, but the conditions necessary



to their enormous multiplication before consumption are at hand. It is rare in cities that at least forty-eight hours and frequently seventy-two hours do not elapse between collection and delivery, and all too common that the temperature at which the milk is kept in the interval offers no impediment to rapid germ development. This is well attested by various city health laboratory reports on the bacterial contents of market milk. In St. Petersburg examinations of samples of milk as delivered at houses showed the presence of from 10,000,000 to 82,000,000 bacteria per cc. Samples of market milk in New York City have shown counts as high as 35,000,000 and London milk 32,000,000. In 1906 the average counts of samples in Washington was 22,000,000 and the maximum 307,000,000 per cc. In Boston previous to the adoption of a standard of 500,000 bacteria per cc. and a temperature of 50° F., conditions were similar.

While the presence of any kind of bacteria in large numbers is unnecessary and not desirable in milk on general principles, it has not been definitely proven that the ordinary saprophytes which constitute the greater number of those present are in themselves harmful. Their number, however, is a most reliable guide to the possible chances of specific infection to which the milk has been subjected, and the condition under which it has been handled and kept. The presence in milk of enormous numbers of bacteria of any variety indicate that the sample is either dirty, old, improperly cooled, or all three. If dirty the possibilities of infection are obvious, if old or warm any infection that may have gained access has multiplied itself a thousand fold. For, unlike water, in which a few typhoid bacilli may rapidly die out, in milk a single bacillus, under favorable conditions, may multiply to such a degree as to not only heavily infect the particular sample, but in addition any quantity of other milk with which it is mixed.

Although the comparatively short time elapsing between collection and consumption renders the question of viability of typhoid bacilli in milk of less importance, it is of interest to note a few of the bacteriological findings in this and other dairy products. As in water, isolation of the organism from market milk is extremely difficult, and Reynolds, then commissioner of health, in 1902 stated that although special search had frequently been made for the typhoid bacillus in Chicago milk during

the last eight years, it had been found only three times. In 1905, Conradi found the bacillus in milk from a bakery which had supplied persons who had acquired the disease. Eyre demonstrated the ability of typhoid bacilli to multiply in milk freshly drawn from the cow under aseptic precautions. In one instance with a small amount of initial infection (seventy-eight typhoid bacilli per cc.), the numbers reached 60,000 per cc. in twenty-four hours, and 10,000,000 per cc. at the end of forty-eight hours. Bruck, in 1903, found the bacillus alive in the cream separated from artificially infected market milk after ten days, and in butter made from the cream twenty-four days.

But, while the behaviour of typhoid organisms in milk after entrance therein may be of secondary interest, the various ways in which they may enter is of the first importance. While somewhat general, the statement is nevertheless true that every time milk is touched, handled, contained in or exposed to any agent, animate or inanimate, not aseptically clean in the ordinary sense, it is subjected to a possible typhoid infection. The multiplicity of ways in which milk may receive typhoid infection is best illustrated by the summary of milk epidemics prepared by Busey and Kober. In all there were one hundred and thirty-eight typhoid epidemics directly traceable to infected milk. "In one hundred and nine instances there was evidence of the disease having prevailed at the farm or dairy. In fifty-four epidemics the poison reached the milk by soakage of germs into the well water with which the utensils were washed, and in thirteen of these instances the intentional dilution with the polluted water was admitted. In six cases the infection is attributed to the cows drinking or wading in sewage polluted water. In three instances the infection was spread in ice cream prepared in infected premises. In twenty-one instances the dairy employers also acted as nurses. In six cases the patients while suffering from a mild attack of enteric fever, or during the first week or ten days of their illness, continued at work. In one instance the milk tins were washed with the same dish cloth used among the fever patients. In one instance the disease was attributed to an abscess of the udder. In two others to a teat eruption and to a febrile disorder in the cows. Four originated in creameries, and in one the milk had been kept in the sick room." By this summary it appears that by far the most

frequent manner of infection lies in the direct and indirect contacts from those suffering with some form of the disease, and it is here that the disease in the early prodromal stages and the various unrecognized, undiagnosed and consequently untreated forms of typhoid infection assume a significance that cannot possibly be overestimated. And this does not cease to operate when only those handling milk are themselves infected; the same hands which care for the sick, at the farm, dairy and store, frequently collect, handle and dispense the milk or clean the vessels in which it is contained.

In the light of what is now known about bacillus carriers and the vague, unrecognizable nature of many typhoid infections, it is obvious that any person, ill or in health, may be regarded as a possible source of typhoid organisms, and for the same reason it is equally plain that the fewer individuals there are coming in contact with milk supplies, the smaller the opportunities for typhoid infection by this means become. It is estimated that in the United States during each year one person out of every three hundred has typhoid fever. Lumsden states that the city of Washington is supplied with milk from about 1,000 dairy farms at each of which the average population is seven persons; on this basis about twenty-five cases of typhoid fever a year may be expected to occur in those associated directly with Washington's milk supply, and a number proportionate to size with that of other cities.

In addition to the infection of milk occurring through direct or indirect contact of those suffering with the disease, the other common means of typhoid dissemination operate through this medium. As in other foods, milk may be infected by flies, insects, dust, dirt and water, and it is in the poorly situated and unhygienic distributing dairies and city milk depots that this is most likely to occur.

In general, then, the opportunities for typhoid infection of milk are so many and complex, that it is only when every step in its collection and distribution, and every individual engaged therein are under sanitary control and medical supervision, that this source of infection will cease to be the second most common in the etiology of the disease.

#### SUMMARY.

1. The initial source of typhoid infection is the typhoid patient in the broadest sense, and for a thorough understanding

of the etiology and an ability to prevent dissemination, full knowledge of the manifestations of the disease in all its forms and the behavior of the specific organism in the human body are necessary.

2. Typhoid fever is a true septicemia, and the bacillus may be present in any part of the body and discharges therefrom from the prodromal stage until after convalescence.

3. The manifestations of the disease may be none, hardly perceptible, mild, severe, typical, and atypical. Persons in usual health may carry and discharge the bacilli for years.

4. The initial spread of infection results from: 1st, failure to recognize many of the mild and atypical forms of the disease; 2nd, failure to carry out efficient prophylaxis after the diagnosis is made; 3rd, bacillus carriers.

5. The most frequent means of dissemination is by water, the second by milk. In these and other articles in daily use the typhoid bacillus is viable for considerable but uncertain periods of time, and no limit can safely be placed on the duration of the infective power of any infected article under natural conditions.

6. In so far as the specific cause of the disease is definitely known and its means of dissemination understood, typhoid fever is a preventable disease, the only rational prophylaxis being not only the safeguarding of common food and water supplies, but the early recognition and isolation of infective individuals and the immediate destruction of the specific organism as it leaves the body.

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## THE STATE TUBERCULOSIS SANATORIUM.

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### Account of the Sewage Plant Established There.\*

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By Samuel B. English, M. D.,  
Glen Gardner, N. J.,

*Superintendent of the Sanatorium.*

Many serious problems are often connected with the construction of sanatoria, *e. g.*, the question of a pure and adequate water supply, and the disposal of the sewage material in such a way that they neither become a nuisance nor a source of contami-

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\*Read before the Warren County Medical Society, May 26, 1908.



nation to the drinking water of the community near by.

At the Sanatorium at Glen Gardner we think we have established a sewage plant which may be enlarged with the growth of the institution, and which will not do this. A brief description of our plant may be of interest to your society.

The system as planned by Prof. Charles McMillan, of Princeton, consists of three parts, *viz.*, the collecting system of sewers, the outfall sewer, and the sewage disposal plant. The first is designed to gather the sewage from the several buildings and convey it to a common junction at the head of the outlet sewer, whence it is carried through the sewer to the disposal grounds about 1,300 feet from the main buildings and well below the level of the springs and other features of the collecting system of our water supply.

Inasmuch as the water supply of our institution is derived, at least in part, from the ground water underlying the lands occupied by the buildings and traversed by the sewers, extra precaution has been taken against the possibility of accident polluting the subsoil—by leaks and from defective joints in the sewers, and accordingly the sewers have been made of cast-iron pipe laid with poured and calked joints. A central side outlet has been built in the lowermost reach but one of the outfall sewer, to enable the sewage to be switched off for a short time to the surface of a bit of cultivated land, should at any time such temporary deflection of the flow be deemed necessary to facilitate the repair or enlargement of any of the disposal fixtures.

The sewage plant disposal consists of a septic tank, a flush tank, two sprinkling filters, a supplementary settling basin and a finishing filter. These are named in the order the sewage reaches them. The septic tank has a capacity of ten thousand gallons. Its function is by causing a stagnation in the flow to precipitate and retain a large proportion of the solids contained in the crude sewage, while the liquid thus partially clarified is allowed to escape for further treatment.

Putrefaction of the precipitated solids within the tank soon begins and increases more or less rapidly according to the temperature of the sewage and other conditions. As this progresses and becomes fully established in the decomposing mass of solids there will be evolution of gas absorption and carrying away by the liquids of the soluble products of the decomposition together

with some of the flocculent particles cast up by the gas bubbles. If putrefaction is allowed to play its part within the tank there will be a noticeable disappearance of the solids which will have been precipitated, and therein lies one of the advantages of subjecting sewage to preliminary putrefaction before applying it to other treatment. The necessity for removing solids from a septic tank is of comparatively infrequent occurrence, the intervals between the so-called cleanings of the tank range in practice from four months to a year, and the cleaning is not what the term would literally imply, but merely consists of the removal of sufficient solids, without interruption of the operation of the tank, to make room for a new accumulation of solids during the ensuing run of the tank. The flush tank immediately adjoining the septic tank receives the overflow from the latter and converts the continuous flow into an intermittent one. When the liquid has accumulated within it to a certain height, the contents are automatically discharged at a rapid rate into the pipes leading to the sprinkling filters until the tank is empty, when refilling begins to be followed again by a discharge, and so on.

The sprinkling filters, two in number, to be used simultaneously, are circular pits with water-tight pan-shaped bottoms of concrete provided at their lowest points with a single outlet for each bottom. The pits are walled up above the concrete with dry stone walls. The pits thus formed are each 20½ feet in diameter and are filled above the drains formed in the bottom to a height of 6½ feet with macadam stone varying in size from 1 to 1½ inches. The liquid, which is discharged from the flush tank with a rush, is distributed in the form of a spray on the surface of these beds of crushed stone through nozzles situated a few feet above the surface. During the process the liquid absorbs considerable air and, trickling downward through the broken stone, becomes appreciably charged through the entanglement among the stones of the slime and flocculent particles which it carried and apparently also through the oxidizing processes which render it more or less non-putrescible.

The matters which are arrested in the interstices of the stones undergo further decomposition and are ultimately carried out by the applied liquid into the bottom drains and their discharged pipes. But they then will be of a different character from which they proceed at the time of their applica-

tion to the broken stones; they will be inoffensive, or comparatively so, resembling garden mould; moreover, they will settle rapidly in water and for this reason the effluents from sprinkling filters are proceeded through a small tank where sedimentation takes place and whence the supernatant liquid is led to finishing filters for final settlement.

The finisher filter bed is a bed of coal ashes 83 feet long by 21 feet wide by  $3\frac{1}{2}$  feet deep. The material was selected because it has been found to be an effective purifier of sewage and, moreover, it was expected that the Sanatorium would find in the waste from its own furnaces the necessary ashes to provide for an enlargement of the plant to meet a greater sewage flow than 20,000 gallons daily.

The surface of the filter is separated into three approximately equal parts, all three of which are expected to receive the effluent from the settling basin once in rotation within each twenty-four hours. The tub drains of the filter delivered the effluent from the filter upon the surface of the filtering bed. A recent examination of the effluent failed to reveal the presence of either colon or tubercle bacilli.

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### HIGH FREQUENCY ELECTRIC CURRENTS AS USED IN GENERAL PRACTICE.\*

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By **Walter P. Glendon, M. D., Cedarville.**

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In accepting the invitation of your secretary to prepare a brief paper for discussion here to-day, it occurs to me that I cannot select a more profitable or interesting subject than "High Frequency Electric Currents As Used In General Practice," detailing the experience in a number of cases, in my own work, where the results have been so satisfactory that I feel that they should be brought more strongly to the attention of the profession. To those members of this society who are using this modality in their professional work, many of the statements herein made will not seem so extravagant, as they no doubt will be to those unfamiliar with the therapeutic possibilities of electric currents of high frequency, and great though the triumph of modern surgery has been, in the light of these possibilities of other means, more safe and equally effective in many cases, which

do not maim nor destroy, the use of the knife is certain to be curtailed in the future. A growing tendency is noticeable, in this age of scientific progress, to limit the application of drugs and utilize more the various physical forces,—as heat, light, electricity and vibration, all different manifestations of the same eternal motion of the ether waves, whose energies work everywhere the wonders of life and motion.

As our knowledge increases with the further development of the subject, it will open up endless possibilities for the accomplishment of results, hitherto undreamed of in the realms of medical science. It is interesting to note, in tracing the history of electricity, that static electricity, which is in reality a current of high frequency and tension, was the only form used in the early system of electro-therapeutics, but after the introduction of Galvanism and Farradism its use was abandoned for a long time. The reason for this seems to have been due to several causes, chief among which was the inability of the operator to localise or control the dosage, and from a lack of precise methods for the administration of the current. These objections no longer hold and now instruments of accuracy and precision are available that give the operator perfect control of the current and makes its administration no longer a matter of guess work. The term "electricity" being of general signification, includes a variety of manifestations, from the high voltage and magnitude of lightning with its destructive action, to the static current with its high voltage and small volume.

The full range of the physiological action of the high frequency currents has not been elucidated and many problems in connection therewith await further experience and study for their solution. It is characterized by its influence over the functions of the nervous system and to some extent over those of nutrition and metabolism as well. Administered in the form of general electrification, the action is manifested by a mild stimulating and invigorating effect on the vaso-motor nerves. It first causes contraction of the arterioles with a corresponding limitation of the vascular supply, to be followed, when the seance is prolonged, by vaso-motor dilatation and lowering of the tension of the vascular system, evidenced by a marked diaphoresis. On general and local metabolism, the Morton wave current in particular, exerts a profound influence, increasing weight and improving the haemoglobin

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\*Read before the Tri-County Medical Society of South Jersey, May 26, 1908.



percentage of the blood, which effects are supposed to be due to the stimulation of cell activity throughout the body, by the passage through the tissues of the rapidly moving electrons. The alternate contractions and relaxation of the tissues compress the blood vessels and press out inflammatory exudates through the blood and lymph channels, thereby promoting the absorption of the wandering white blood cells and other inflammatory products. In other words, it diminishes congestion, and removes pressure from the nerves and consequently relieving pain and soreness.

I have found the wave current to have the widest range of utility and very effective in treating a large variety of non-infective inflammatory conditions. When the more active form of the static, as for instance, the spark, is used, the reaction is much more pronounced. The sensory nerves are irritated, the muscles are thrown into a strong contraction, and if the action is localised and continued too long, irritation of the skin and blistering will result, and instead of a refreshing and invigorating effect being evident, marked depression of the vital powers occur. Consequently this form of administration is painful and for this reason the application of the spark is reserved for those conditions in which it is desirable to obtain a derivative and counter irritant action on the skin, and under these circumstances it constitutes a potent agent for good. Auto-condensation has been found useful in the treatment of tubercular and gouty affections. It promotes metabolism and has a direct action on arterial tension. I have seen patients whose tension equalled 200 mm. of mercury according to the sphygmomanometer before undergoing treatment and after the seance the reading has fallen to 150 and 160. Men prominent in this line of work have been reporting some wonderful results in arteriosclerosis and pulmonary tuberculosis.

The utility of an agent that covers such a broad field in therapeutics can scarcely be over-estimated, and the many and varied manifestations of disease that are brought directly within its influence, would lead us to expect results that subsequent experience in many cases has justified. Having such a potent influence over the functions of the nervous system, we may reasonably expect it to produce prompt and curative results in perversion and abolition of the function of the spinal nerves, and in this I have not been disappointed, for the celerity with which these results are ac-

complished, especially in the various forms of neuritis, are little short of marvellous. The record of the following case will serve to establish its value in this connection. In the early part of this year I had under treatment for sciatic neuritis, a man about forty-five years of age. I gave him all of the remedies that I considered suitable for his condition with the usual unsatisfactory result. Nothing that I tried did any good, and I could only ameliorate his suffering by opiates. He grew progressively worse and finally became absolutely bed-ridden. This state of affairs continued for about three weeks, when I told him frankly that all the medication was not accomplishing any good and suggested that he be brought to my office for treatment. He finally consented under protest, and the next day he was brought up from his home on a cot and carried into my office. I gave him a twenty-minute treatment with the wave current and followed this by the application of short, quick sparks over the whole course of the nerve, from the notch down to the ankle. This part of the treatment was rather painful, but the effect was almost instantaneous, for the patient expressed himself as feeling better before leaving the office, and after the second treatment he was able to discard his crutches and, for the first time in several weeks, he was able to go to bed and sleep without an opiate. This man was a complete physical wreck; his nerves were shattered, appetite and digestion impaired, and so weak he could scarcely stand unassisted. In order to give the treatment a fair trial all drugs were discontinued, much to the patient's satisfaction and also his benefit. Improvement was rapid and progressive from the very first treatment, and in a short time he was able to resume his occupation. The result of the treatment was so satisfactory in this case alone, and I could report results almost as prompt in two others, that I would consider myself failing in my duty to my patient, should I ever attempt the treatment of a case of sciatica by the use of drugs alone.

From the foregoing evidence, the conclusion seems inevitable that for the treatment of inflammatory conditions of the peripheral nerves, static electricity gives quicker and better results and is unsurpassed by any other form of treatment. In lumbago we have a condition closely allied to the above conditions, in symptoms at least, and I have patients hobble into my office whose lumbar muscles were tense and painful, unable to stand erect and yet a few minutes' treatment

almost completely removes the pain and spasm. For these patients static electricity replaces the hypodermic and the effects are more permanent. I have under treatment at this time a young man who has all the symptoms of incipient tabes. The muscular weakness, spastic gait, and muscular inco-ordination are all well developed. I have been giving him weekly treatments and he continues to show marked improvement. He so expresses himself, and my examination demonstrates it, although any form of treatment that will satisfy and enable the doctor to hold a patient for his own exclusive use and benefit must of itself be *prima facie* evidence that good is being accomplished, because these patients are acute observers of their condition and they soon change their medical advisers if they fail to get what they feel that they are paying their good money for.

I have elsewhere made the statement that electricity will promote the absorption of non-septic inflammatory exudates and I can offer no better evidence in support of this contention than the results that I have obtained in the treatment of bad sprains of the joints, in general and those of the ankle joint in particular. I think the statement will remain unchallenged when I say that under the most approved treatment, it will require at least two weeks and often longer, for a patient to regain the use of the ankle after a bad sprain. A short time ago, a student of Swarthmore College consulted me for a teno-synovitis of the ankle point, caused by a sprain of the ankle during participation in some athletic event. The college physician sent him home on crutches, with the joint enveloped in antiphlogistine and gave him positive instructions to refrain from using the leg for two weeks. Examination revealed a swollen and tender joint, and all motion was exceedingly painful. I gave him a half hour treatment by the wave current, followed by brisk sparks to the joint. Relief followed at once, but he looked at me in amazement when I told him to discard the crutches and walk out of the office without them. He did so, however, and after giving him four daily treatments he returned to school and in three weeks was in condition to run in one of the relay races. The result to him as well as myself was very gratifying, and he remarked to me on leaving that there must be a trick about it.

There is another class of cases that is frequently met with and which cause no end of trouble and care to the physician as they

pass on their rounds from one doctor to another and proudly relate for the edification of each one the number and variety of operations that they have had performed. I refer, of course, to that class of neurotics who have suffered mutilation and abrasion of their pelvic organs and whose numbers are by no means few. In quite a few of such cases I have made them more comfortable and succeeded in getting their nervous systems in a more stable equilibrium. The vacuum electrode placed over the cervix will have a marked curative effect on the low grade of endometritis that frequently follows operations on infected tubes and ovaries. The pains are lessened and the absorption of localized exudations is promoted. I have also seen the most satisfactory results follow its use for the dysmenorrhoea of young girls. I had the opportunity of testing the virtues of the agent for simple hypertrophy of the prostate where there is no formation of plastic tissue. In one old man on whom I tried it I reduced the number and frequency of nocturnal urination, thereby greatly promoting the comfort and welfare of the patient. The vibratory action of the current has a pronounced massage effect and the liberation of nitrous acid gas, an active antiseptic agent, has also a pronounced effect on the pathological condition. I could cite many other cases in my own practice where I have secured most desirable results with this agent, but as these cases represent a common class met with in the practice of all general practitioners, their number will suffice to prove its worth.

In conclusion, I desire to extend my thanks to the secretary for his invitation to address this distinguished gathering. My thanks are also due the members for their forbearance and kind attention, while I have been taking such liberties with a subject of such intense and absorbing interest, but the entire subject of electricity in its therapeutic relation still demands study and experiments as well as analyzed and recorded clinical observations, and that I may contribute my humble share toward this end is a matter of satisfaction to me.

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**School of Preventive Medicine.**—The State Health Commissioner has announced that arrangements have been made to establish a school of sanitary science and preventive medicine at Cornell University. The course will open on October 8, and lecturers have been appointed from the university faculty and from the staff of the State Board of Health. Lectures on special topics in sanitary engineering will also be given by specialists.



## ANNUAL REPORTS OF THE COUNTY SOCIETY REPORTERS TO THE COMMITTEE ON SCIENTIFIC WORK.

### ATLANTIC COUNTY.

*To the Chairman of the Committee on Scientific Work:*

During the past year the Atlantic County Medical Society has held three regular business meetings in the months of October, February and May. Special meetings have been held each month when the different members read papers and discussed various subjects of interest. Among the contributors were Drs. Reynolds, Darnall, Githens, Ridgeway, Saulsberry, E. Marvel, P. Marvel, Harvey, Simmons and Dunlap. Dr. Robertson, of Philadelphia, gave a talk on the "Cardio-Renal Syndrome," at the April meeting. At the last meeting, held in May, an amendment to the Constitution was regularly adopted calling for regular meetings, to be held on the first and third Fridays of each month, excepting the months of July, August and September. This will give us two meetings a month, one to be given over to out of town guests invited for the occasion, and the other for our own members.

During the year we have received into membership Drs. G. F. Ralston and G. W. Stimpson, both of Atlantic City.

There have been no deaths and while several of our members have been seriously ill they have sufficiently recovered to take an active part in the County affairs. No epidemic of any importance has occurred in the County and the general health of the community is reported by our members in better health than it has ever been.

THEODORE SENSEMAN, Reporter.

### BERGEN COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Bergen County Medical Society held its annual meeting at Hackensack April 14, 1908. The following officers were elected to serve for the ensuing year.

President—Dr. Henry C. Neer, Park Ridge; Vice-President—Dr. Philip E. Brundage, Grantwood; Secretary—Dr. Charles W. Harreys, Ridgewood; Treasurer—Dr. Frank Freeland, Maywood; Reporter—Dr. Valentine Ruch, Jr., Englewood.

Meetings for the year passed were especially well attended and showed renewed interest. With our present membership of fifty-five the Society has sufficient good material in all its departments to make our subsequent meetings even more valuable. Besides our regular annual, semi-annual and quarterly meetings, several special meetings were called during the year.

Of special moment was a Symposium held at Hackensack last November. The subject, Anterior Poliomyelitis, was very ably discussed by Dr. Henry Heiman, of New York, who reported on a number of cases treated in the children's ward at Mount Sinai Hospital. Dr. M. G. Schlapp, of New York, spoke from the Neurological standpoint and elaborated on the symptoms and treatment; while Dr. Strauss gave the pathology of eight autopsies that came under his personal notice. Several members added inter-

esting observations made in Bergen County during the recent prevalence of this illy understood malady. At a recent quarterly meeting Dr. Walter B. Johnson, of Paterson, gave a very interesting talk and demonstration on the use of the Broncho, Gastro and Esophago-scope.

Dr. Charles W. Harreys, of Ridgewood, read a very interesting and instructive paper on treatment of anemia.

In the closing of this year our Society met with a loss by the death of Dr. L. B. Parsell, of Closter. His far-reaching kindnesses, mild and conscientious methods endeared him in the hearts of his patients and friends. His memory will live with us as long as any of us shall survive.

Respectfully submitted,

VALENTINE RUCH, JR., Reporter.

Englewood, May 15, 1908.

### BURLINGTON COUNTY.

*To the Chairman of the Committee on Scientific Work:*

Earnest solicitation of the entire membership of the Society having failed of adequate returns, your reporter is hampered by a dearth of material from which he must compile his report. Of necessity, therefore, this effort is likely to prove rather perfunctory than interesting.

The October meeting of the Burlington County Medical Society was held at Coles' Hotel, Moorestown, New Jersey, the feature of which was a lecture on the treatment of cancer by the Roentgen Rays, illustrated by lantern slides and oxygen light, by Dr. G. F. Pfahler, of Philadelphia. The meeting was unusually well attended and great interest was manifested in Dr. Pfahler's remarkable results.

The January meeting was held at the same place and was devoted to the annual election of officers and to our wives and lady friends, who met with us in our second social session. Our April meeting, called at Beverly, I was unable to attend, and have not been able to procure minutes of the proceedings.

From the third to the tenth of March there was given a free tuberculosis exhibition at the Court House, in Mount Holly, New Jersey. It was held under the auspices of the Local Branch of the New Jersey Association for the Prevention and Relief of Tuberculosis. The demonstration was rendered more impressive and interesting by lectures, delivered during the week by Drs. Judson Daland and William Stanton, of Philadelphia. Much credit is due to the prominent business men and public-spirited women of the town for the hearty cooperation they afforded the physicians and the local Board of Health in making the demonstration a pronounced success.

The health of the county for the past year, so far as heard from, has been fairly good. The usual diseases of the season have prevailed to some extent.

During the fall and winter typhoid fever assumed an epidemic form in Burlington and Roeb-ling, probably due to contamination of the Delaware River water, which had been generally used for drinking purposes. In support of this view as to the causative factor of typhoid fever, in this instance, at least, the City of Bordentown has become practically free from the disease since the introduction of the new water system several years ago. Mount Holly has had ten cases during the past year, with one death. Three

of these cases were traced to Trenton water. The cause of the other seven has not been determined.

La Grippe in an aggravated form prevailed quite generally during the winter and early spring months. It was characterized by sudden invasion, high temperature and great prostration. In many cases it was complicated by pneumonia, otitis media, and other catarrhal conditions of head, throat and bronchi. The death rate, especially among people advanced in years, was larger than usual.

Epidemics of measles have been reported from various places, notably Edgewater Park and Columbus; some of the cases were complicated with bronchial pneumonia, but few cases resulted fatally. In this connection one report deplors the apparent indifference of some physicians and local Boards of Health to the sanitary control of this disease. He cites experiences where four cases of measles, contracted in adjoining towns and allowed unrestrained freedom during convalescence, resulted in reducing the attendance at the local school from over one hundred and fifty to thirty pupils.

Five cases resulted fatally from complication by bronchial pneumonia. As measles is not classed by the State as a quarantinable disease, the only remedy would seem to be medical inspection of all schools, both large and small. By such means the epidemic in question might have been arrested, precious lives saved and the demoralization of this public school avoided.

There seems to be some reaction as to the advisability of a too free use of antitoxin serum in diphtheria. All agree that it should be given early; but that the subsequent use of it should be governed by great conservatism.

One physician reports six well defined cases treated successfully, without the use of antitoxin, and mentions the point, not in any sense reflecting upon the value of said recognized remedy, but simply to show that there are other successful methods in the treatment of this disease.

Very truly yours,

WILLIAM P. MELCHER, Reporter.

Mount Holly, May 14, 1908.

### CAMDEN COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The year's work of the Camden County Society has been an active and more successful one than usual. The October 8, 1907 meeting had a large attendance, several guests were present from adjoining county societies. Dr. H. H. Sherk, of Camden, presented a paper on "The Hygiene of the Oral Cavity," which was discussed by Drs. J. F. Leavitt and W. I. Kelchner. Dr. Alexander McAlister read a paper on "The Pathology of Typhoid Fever in Children. Dr. J. W. Martindale read one on "The Value of the Leucocyte Count as a Diagnostic Aid," illustrated by black-board demonstrations and microscopes. These were discussed by Drs. Markley, Chavanne, Sherk, Lippincott, Rose and Rowntree. Several new members were proposed.

Dr. Daniel Strock, the wide-awake secretary, sprung a surprise in issuing for this meeting the first number of "The Journal of the Camden County Medical Society," which is to be a quarterly issue, giving programs of the meetings and items to stimulate interest in the Society. A por-

trait of the late Dr. Onan B. Gross was presented to the Society by his widow. Dr. H. G. Taylor made the presentation speech and Dr. E. B. L. Godfrey replied, both dwelling upon the doctor's faithful services for more than thirty years.

The December 12th meeting had an unusually large attendance. The Philadelphia County Society was represented by its Vice-President, Dr. Eaton, and several county societies had representation. A paper on "The Present Status of the Treatment of the Insane," was read by Dr. W. A. Westcott, of Berlin, and discussed by Drs. Palm, Sprenger and others. Dr. Thomas B. Lee spoke on "The Diagnosis of Carcinoma of the Uterine Cervix;" Dr. Joseph S. Baer, on "The Imperative Necessity of Early Diagnosis of Uterine Carcinoma." The discussion of these papers was participated in by Drs. Alexander Marcy, Sr., Lippincott, Stevenson, Sherk, Richardson, Godfrey, and Sprenger. Dr. Daniel Garrison was received as a member from the Salem County Society and Dr. Albert Davis, of Camden, was elected a member.

The third regular meeting was held February 11, 1908. On account of severe illness of the President, Dr. Bushey, the Vice-President, Dr. Paul Mecray, presided. The following were elected to membership: Drs. Samuel B. English, Thomas B. Lee, Edward Parry, Ernest Hummel; Drs. Lettie A. Ward and Lee Griscom were proposed for membership. This was especially a social meeting, the wives and daughters and several guests being present, and a bountiful supply of refreshments was provided. Dr. English, editor of the JOURNAL, made an address and vocal and instrumental music was enjoyed.

The following gentlemen were elected to political positions during the year:

Dr. E. L. B. Godfrey was elected President of the State Board of Medical Examiners; Dr. W. P. Wingender, Coroner of the County of Camden; Dr. William H. Iszard, Food and Drug Inspector of the Camden City Board of Health.

We give the following figures and facts from the reports of the Cooper Hospital and the City Dispensary for the year ending Dec. 31, 1907: Cooper Hospital, in the hospital Jan. 1st, 45; admitted during the year 1,309, total 1354. Discharged: cured, 848; improved, 245; not improved, 16; left without permission, 9; died 138; remaining in ward, 62; births, discharged, 26. Number of patients who died within 48 hours after admission,—hopeless cases when admitted, 62.

The new addition to the Cooper Hospital meets a long felt want and gives this noble institution as fine a set of operating rooms as can be found in the State. This, together with rooms for wards, etc., gives it better opportunity for usefulness and brings it up-to-date.

Camden City Dispensary: Number of prescriptions compounded, 8,257, running in monthly number from 501 in September to 925 in March. Number of cases treated, 970, lowest 58 in July; highest 130 in May, of which 953 are classed medical, surgical and skin and 17 eye cases. Number of visits to Dispensary, 1,311. Number vaccinated, 97. The District Physicians report: First district, 93 patients and 504 visits; second, 73 patients and 300 visits; total 166 patients and 804 visits.

Respectfully submitted,

HENRY H. SHERK, Reporter.

Camden, N. J., May 14, 1908.



**CUMBERLAND COUNTY.***To the Chairman of the Committee on Scientific Work:*

I herewith forward a brief account of the work of Cumberland County Medical Society for 1907-1908. The Semi-Annual Meeting of the Society was held at Millville October 8, 1907. Dr. Elton S. Corson presiding. Two of the regular papers not being forthcoming, A. J. Mander, of Millville, read a paper on alkalometry setting forth the advantages of this so-called system, which consisted in the more accurate dosage made possible and the more certain systemic effect of active principles of drugs. Typhoid fever was also discussed, a paper on this subject being read by Dr. Charlesworth. He had had uniformly good results from salol as a routine remedy with such modifications of treatment as special symptoms demanded.

At the quarterly meeting of the Society in January, which was also held in Millville, Dr. C. W. Wilson, of Vineland, read a paper on "Opsonins," which was a very good presentation of this most interesting subject. Dr. E. J. Chapman, of Shiloh, also presented a report on progress in therapeutics during the past year.

The Annual Meeting of the Society took place in Bridgeton, April 14. Dr. J. C. Loper, of Bridgeton, was elected President. Dr. C. W. Wilson, of Vineland, Vice-President, and Dr. A. J. Mander, Secretary and Treasurer.

Dr. J. C. Applegate, of Philadelphia, read an extremely interesting paper on "Eclampsia and its Treatment," reporting forty consecutive cases without a death and his treatment consisted of diaphoresis and irrigation of the colon, with veratrum viride in sthenic cases. The use of morphia irritating diuretics, and purgatives—such as croton oil, together with venesection, was condemned and none of these agents were used. At this meeting, by request of Dr. Philip Marvel, State Medical Society Councillor, a committee was appointed to look up the subject of post-graduate work and report at the next meeting of the Society. A committee was also appointed to promote better feeling between the medical profession and the public and a better understanding of their mutual interests.

New members elected were Drs. W. A. Wilson, of Bridgeton, F. V. Ware, of Millville. With the exception of the epidemic of measles, there has been a comparative absence of contagious diseases during the year, and the health of the community has been fairly good. Grippe, however, was prevalent during the winter to a considerable extent. There have been no deaths in the Society during the year just closed, neither has the Society lost any members by removal or transference to other societies. During the coming year it is hoped to make more progress in the direction of post graduate work as well as increase in the efficiency of the Society's work in other respects.

JOHN H. MOORE, Reporter.

Bridgeton, N. J., May 15, 1908.

**ESSEX COUNTY.***To the Chairman of the Committee on Scientific Work:*

The Essex County Medical Society reports for the year the following meetings:

October 22nd, 1907, with a lecture by Dr. William M. Polk, of New York City, on "Relation

of the General Practitioner to the Specialties;" November 19th Dr. Norman E. Ditman, of New York City, on "Opsonins and Vaccines in Medicine and Surgery;" February 25th, 1908, Dr. Francis C. Wood on the "Value of Modern Laboratory Research Methods for the Practitioner of Medicine;" May 23, 1908, (postponed from January 21st) Hon. Champ Andrews, of New York City, on "Quacks and their Methods." At the meeting of Jan. 21st, we were entertained by a special stereopticon lecture on the steel industry, by Prof. Byron C. Matthews. All of these meetings have been reported in the JOURNAL currently during the year. Each address was a masterly presentation of its subject and met the interest of an appreciative audience.

Beside the above scientific meetings the annual business meeting was held April 7th, 1908, at East Orange, President Herman C. Bleyle in the chair. Much important business was transacted. The revised Constitution and By-Laws were printed and distributed. Action was taken on the medical interests concerned in the various bills pending before the State Legislature. A communication on six different matters of society importance was received from the State Society and referred to the Council. An important amendment to the By-Laws was carried, giving the Council power to act for the members and, if necessary, to employ counsel. The necrology committee was empowered and requested to publish obituary notices promptly after each death, instead of waiting for the annual meeting of the Society. The International Tuberculosis Congress at Washington was recognized and delegates appointed. A collation followed the business meeting.

Twenty-five new members have been elected and the following have died: Dr. Aaron K. Baldwin, of Newark, (Feb. 9th, 1908); Dr. Charles H. Bailey, of Bloomfield, (Dec. 10th, 1907), and Dr. Wm. Rosensohn, of East Orange.

The Society for the Relief of Widows and Orphans of Medical Men of New Jersey held two special meetings, (Dec. 27th, 1907 and Jan. 10th, 1908), to amend the Constitution and By-Laws, striking out the word "regular" as a qualification for admission to membership. The annual meeting was held Tuesday evening, May 12th, 1908. New progress during the year was reported in membership, in amount of payment now made at death of a member, and in size of the permanent fund. A way in which the members could help to still further spread the usefulness of this helpful organization is by soliciting for new members. The Secretary's map shows how, especially in the southern half of the State, the membership might be greatly multiplied if the present scattered members would secure others in their own localities.

The William Pierson Medical Library Association has done its usual excellent work in providing a series of lectures by eminent visiting authorities and inviting all the profession. This year the subject for the course was "The Brain," the program being as follows: December 10—"Modern Anatomy and Localization of the Brain," by Dr. M. Allen Starr; January 14—"Diseases of the Brain," by Dr. C.L. Dana; February 11—"Surgery of the Brain," by Dr. Frank Hartley; March 10—"Insanity," by Dr. Frederick Peterson; April 14—"Mental Therapeutics," by Dr. John D. Quackenbos; May 12th was a clinical night with presentation of cases of brain and nervous diseases. These were all enjoyed by good

audiences and the worthy aim of the Association thoroughly appreciated.

Among our other medical clubs the Newark Medical League deserves special mention for its broad-minded policy of inviting all the profession to hear papers by eminent visiting guests on subjects of new, or otherwise important interest. The meetings this year included the following lectures: "Prof. Bier's Method, for Passive Hyperaemia, in Therapeutics," by Dr. Willy Meyer, (Dec. 9th); "Pneumonia," by Dr. W. P. Northrup (Feb. 24th); "The Diseases of the Breast," by Dr. Edward J. Ill (April 27th); and "The Modern Treatment of Fractures," by Prof. Carl Beck (May 25th).

The Medical Library Association of Newark has progressed steadily in resources and interest, the annual reports, November 30th, showing a very satisfactory condition of membership and finances. A noteworthy feature of the year's work has been the issuance of a full Medical Catalogue, giving by subjects all the works on Medicine and its collateral sciences, owned by either the Medical Library Association or the Free Public Library. This Catalogue was mailed to every registered physician in Essex and adjoining counties.

In conclusion, we are glad to observe a quickening interest in matters of common welfare and broader medical sympathy. If our County Society and Medical Clubs, in common with the others throughout the State, and helped by our State Society Journal will continue to strive for the noblest things for which our profession stands, our united efforts will give our State Society, now holding its 142nd annual meeting, a position worthy of its age.

Respectfully submitted,

FRANK W. PINNEO, Reporter.

Newark, N. J., May 15, 1908.

### GLOUCESTER COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Gloucester County Medical Society has held five regular meetings during the year, including the usual social session in September. The scientific meetings have been well attended and of much interest. Instructive papers by Drs. L. M. Halsey, upon the "Early Diagnosis of Pulmonary Tuberculosis;" Joseph Price, of Philadelphia, "Surgical Diagnosis, with a short history of early operators and operations;" John M. Swan, Philadelphia, "The Diagnostic Significance of Leucocytosis," illustrated with several specimens, proved of general interest and called forth free discussion.

At the January meeting, Dr. T. B. Rogers, D. V. S., of Woodbury, in an able address, presented the necessity of a more efficient cattle and milk inspection, and asked the members to urge the passage of necessary legislation to secure the establishment of a Bureau of Animal Industry. Both of these propositions were endorsed by the Society.

The Society also favored the Congressional bill of the A. M. A., granting pensions to the widows of Drs. Carroll and Lazear, who lost their lives in studying the cause and prevention of yellow fever, in Cuba.

Dr. W. G. Simmons, formerly of Swartsboro, and for several years Reporter of the Society, and

more recently its Vice-President, has resigned from the Society and removed to Brooklyn, N. Y. Dr. J. Harris Underwood, of Woodbury, has been the only new member admitted.

Measles, of a severe type, diphtheria, scarlet fever and lagrippe, generally mild in character, have prevailed to a considerable extent during the winter.

Respectfully submitted,

H. A. WILSON, Reporter.

Woodbury, N. J., May 16, 1908.

### HUDSON COUNTY.

*To the Chairman of the Committee on Scientific Work:*

Number of meetings held—Four regular and two in conjunction with the Retail Druggists Association of Jersey City. Papers read by Dr. S. R. Woodruff, "Diphtheritic Infection of Larynx;" by Dr. P. J. Hamill, "Epidemic Cerebro-Spinal Meningitis;" by Dr. J. Mooney, "Abdominal Hernia and its Treatment;" by Dr. Paganelli, "Trichiasis." Most of these have been published in the JOURNAL. Interesting cases have been reported in good numbers at each meeting and reported in full in the State Society's Journal. The number of new members admitted is far larger than usual—38. No unusual contagions except gripe and pneumonia of a severe type last winter and measles and scarlatina this spring. The annual average death rate for the county is about 20 per 1,000. Active interest has been manifested by members in the advancement of medicine and surgery, and an effort made to conscientiously forge to the fore in our work and to make it of real scientific value.

Active work was engaged in in the legislative and political field in re-"anti-vivisection" and "osteopathy" controversies, and delegations second to none in size or prominence made every effort to fulfill the will of the Society.

Respectfully submitted,

AUGUST A. STRASSER,  
Reporter.

Arlington, May 14, 1908.

### HUNTERDON COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Annual Meeting of the Hunterdon County Medical Society was held on April 28, when the following officers were elected for the ensuing year:

President—T. B. Fulper, Junction; First Vice-President—Enoch Blackwell, Clinton; Second Vice-President—George Henry, Flemington; Secretary—O. H. Sproul, Flemington; Treasurer—Isaac Cramer, Flemington; Reporter—M. H. Leaver, Quakertown; Censors—Drs. Romine, Best and Brokaw; Delegate to the State Society—F. S. Grim, Baptisttown; Alternate—E. D. Leidy, Flemington. Chairmen of Sections: Practice—L. T. Salmon; Surgery—E. W. Closson; Obstetrics—M. H. Leaver; Pathology—F. S. Grim; Therapeutics—George Henry.

Dr. W. A. Clark, Councilor for the Third District, was present and addressed the Society. Dr. G. N. Best read a very witty and interesting paper entitled "Why are Doctors Unpopular."

One member was dropped for non-payment of



dues. At the present time we have several applications for membership pending.

At the October meeting Dr. Henry L. Coit, of Newark, addressed the Society on "The Nutrition of Infants and the Milk Question;" Dr. G. L. Dickinson made an address on "The Minor Operations on the Vaginal Outlet Incident to Obstetric Practice." Both addresses were very interesting and helpful and were generally discussed.

Speaking for my own practice, the past winter has witnessed very few cases of serious acute illness as compared with the previous year, when we had almost an epidemic of pneumonia in its various forms.

This winter and spring, measles and German measles were rife, and very few susceptible individuals escaped. One family comprising a son of twenty-three, both parents and the maternal grandmother of seventy-six all contracted morbilli and contrary to popular opinion the grandmother's case proved to be the lightest of the four. I have heard of no cases in the county ending fatally.

Respectfully submitted,

M. H. LEAVER, Reporter.

Quarkertown, N. J., May 15, 1908.

### MERCER COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Mercer County Medical Society, during the past year, has held seven regular meetings. At these meetings many excellent papers were read and discussed and measures were adopted advancing the interests of physicians and the public health locally. The president of the Society, Dr. David F. Weeks, having been called early in the year to the State Village for Epileptics at Skillman, as its new medical director, his duties have fallen to the Vice-President, Dr. James J. McGuire.

At the October meeting the following papers were read and discussed: "Vertigo from the Standpoint of a Physician," by Dr. William A. Clark, and "Vertigo from the Standpoint of an Ophthalmologist," by Dr. C. F. Adams. At this meeting also, final arrangements were made for the inauguration of a post-graduate course of study as outlined in the A. M. A. Journal. For this purpose meetings are now held every Wednesday evening.

In November was held at the Trenton House, in Trenton, the annual meeting and banquet. At this time, the Society was addressed by Dr. John B. Deaver, of Philadelphia, on the subject of "Uterine Hemorrhage." Then followed a discussion of the subject participated in by Dr. Harry Deaver, of Philadelphia, and Drs. Hawke, Costill and Sommer, of Trenton. The banquet which followed was characterized by many responses to toasts and an exhibition of good feeling among the professional brethren.

At the December meeting Dr. G. N. J. Sommer read a paper on "Echinococcus Disease of the Lungs," in which he reported a very interesting case of this disease. The program of the January meeting consisted of a paper by Dr. J. H. Buchanan, of Plainfield, N. J., on the subject "Bronchial Asthma." This paper was instructive and created a lively discussion. At the February meeting we were favored with an excellent paper by Dr. Alex. Armstrong on "Sanatorium

vs. Home Treatment of Tuberculosis." At this meeting a committee was appointed to investigate any alleged breach of pledge regarding contract practice, all members of the Society being already pledged against such practice. Those present at the March meeting were entertained by an interesting address by Dr. G. N. Best, of Rosemont, N. J., on the subject "Why Doctors are Unpopular."

At the April meeting Dr. M. S. Simpson, of Titusville, N. J., who has served as a surgeon in the Army and Navy for twelve years, gave an exceedingly interesting illustrated lecture on "Personal Experiences in the Army and Navy in China, Japan, the Philippines and Cuba." The meeting in May was concerned only with the transaction of routine business and the election of officers for the ensuing year. It was decided that future meetings of the Society should be held in the Council Chamber, City Hall, this place proving more commodious than the present quarters.

During the past year, there has been a very severe epidemic of typhoid fever on either side of Trenton, that is, at the State Hospital on the north, and at the village of Roebbling on the south. However as this subject was not considered at length before the Society, it is not discussed in this report.

Respectfully submitted,

EDGAR L. WEST, Reporter.

Trenton, N. J., May 21, 1908.

### OCEAN COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Ocean County Medical Society held its semi-annual meeting at the residence of Dr. W. G. Schaffler, Lakewood, on the evening of April 21st. Eight members were present and after transacting routine business and electing several new members, the rest of the evening was pleasantly spent in discussing cases and partaking of refreshments.

The following new members have been added to the roll since October: O. H. Thompson, Cassville; J. M. Craig, Lakewood; F. S. Ball, Lakewood; E. H. Gaudineer, Lakewood; George W. Lawrence, Lakewood; M. A. Morine, New Egypt; and two more are in prospect, making by far the largest number of new members added since the society was organized. There are at present 19 active members in the society.

A medical milk commission has been formed, and in a quiet way has commenced work, in the hope of being able in the near future to do much toward raising the standard of the milk sold.

There has been an unusual freedom from epidemic contagious disease in the county, no serious epidemic being reported.

Respectfully submitted,

W. G. SCHAFFLER, M. D., Reporter.

Lakewood, N. J., April 27, 1908.

### PASSAIC COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The history of the Passaic County Medical Society during the past year, though not marked by any striking event, has been of considerable interest. The meetings have been held regularly,

and have been well attended. According to custom, one meeting was held in Passaic, the others in Paterson. Several papers of more than usual interest have been read before the Society, among them being one on "Joint Complications following Infectious Diseases," by Dr. Newton, and one on "Mouth Breathing," by Dr. Demarest. The May meeting was devoted to a discussion of "Medical Inspection of Schools," which included papers by Dr. John J. Cronin, of the Health Department of New York, and School Superintendent A. B. Poland, of Newark, as well as several members of the Society and local school men. The meeting was reported in the daily papers, and aroused considerable interest.

Death has invaded our ranks once during the past year, leaving us to mourn the loss of one of our ex-presidents and most generally esteemed members, Dr. John H. Banta. We have lost one member by removal from the state, and have added six new names to the roll.

Of matters of professional interest outside of Society work, probably the chiefest has been the reorganization of the Medical Society of the Paterson General Hospital. This is now organized into nine departments, viz., medical, surgical, gynecological, obstetric, pediatric, orthopedic, ophthalmorhinologic, dermatological, and pathological, under the direction of a visiting staff of nine members, with twelve associates. The out-patient service has also been divided into corresponding departments except ophthalmologic, and brought into direct relation with the ward service of the hospital.

Also of interest is the project for marking the twenty-fifth anniversary of the Paterson Eye and Ear Infirmary, which occurred on May 5th, by the construction of a new building for the infirmary. A suitable plot of ground has been given for the purpose by Mrs. Robert Barbour, of Paterson, and over half of the money for the building has been subscribed. The plans are nearly ready, and it is hoped to begin work during the present summer. Without waiting for the new building, it is planned to reorganize the infirmary staff so that clinics may be held daily, instead of tri-weekly, as at present.

There has been more than the usual amount of measles in Paterson this spring, and a good deal of scarlet fever in Passaic, but the public health of both cities has been generally good, and the death rate low. Otherwise little or nothing has occurred of sufficient interest to call for special mention.

Respectfully submitted,

E. LUCAS HENION, *Reporter*.

Paterson, N. J., May 15, 1908.

### SALEM COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The three regular meetings of this Society since the last report to the State Secretary were held on November 6, 1907, Dr. N. S. Hires, presiding, when Dr. E. P. McGeorge, of Woodstown, was elected a member of the Society, also Surgeon C. E. MacDonald, of Fort Mott.

The revision of the constitution and by-laws was made the duty of Drs. C. M. Sherron and B. A. Waddington as a committee.

Dr. Summerill read a paper entitled, "Diphtheria, Membranous Croup, Symptomatic Resemblance and Mortality Percentage in Both."

The reduction of mortality in recent years being due to the therapeutic property of antitoxin serum when judiciously administered.

Dr. Daniel Garrison was granted a transfer of membership to the Camden County Medical Society.

The meeting held at the Shaefer House, Salem, February 5, 1908, was of a strictly local membership. The weather being so portentous of storm, most of the session was devoted to second reading and a digest of the revision of the constitution and by-laws, as offered by the committee.

The annual meeting occurred on May 6, 1908, at which Dr. Philip Marvel, district councillor, was present, and addressed the members regarding his official duties, and the Society secretary's responsibilities to the State Society and the JOURNAL, and made an appeal for better observance thereof.

Dr. W. T. Hilliard, a member of the Society, read a paper entitled, "Vesical Calculus." A case was presented, so well prepared with indications of careful observation and research and showing such good practice that Dr. Marvel and others in the discussion that followed, commended the doctor in complimentary terms.

Respectfully submitted,

JOHN F. SMITH,  
*Reporter*.

Salem, N. J., May 15, 1908.

### ANNUAL MEETING SALEM COUNTY.

At the meeting of Salem County Medical Society, held on the afternoon of May 28th, the following officers were elected to serve during the ensuing term: President, L. M. Hummel, Salem; vice-president, J. M. Summerill, Penns Grove; secretary and treasurer, Henry Chavanne, Salem; reporter, John F. Smith, Salem; censors, John F. Smith, Salem; R. F. Harris, Canton; W. H. James, Pennsville. Delegate to State meeting, E. E. DeGroff, Woodstown.

### UNION COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Union County Medical Society has, during the past year, held four regular and three special meetings. The special meetings were called for the purpose of taking action upon the death of three of our prominent members: Drs. Edward R. O'Reilly, Lee McElroy and J. B. Probasco. In each instance appropriate resolutions were adopted and copies forwarded to the family of the deceased and to the daily papers.

There have been elected to the Society three new members so that the total now enrolled numbers eighty.

Several interesting papers have been read and numerous cases reported this year. At the July meeting Dr. Mravlag presented a baby, between six and seven months of age, which had suffered from intussusception. At operation the caecum, appendix, and portion of ileum were found invaginated into the ascending and transverse colon. It was possible to reduce the condition without great difficulty, during which manipulation a longitudinal tear was discovered in the gut. This was stitched and the abdomen closed, after which the baby made an uneventful recovery.

Dr. J. P. Reilly reported the following case:



A young girl 16 years of age complained of pain in the region of perineum and vagina. On examination the perineum was bulging and it was thought that a deep seated abscess was present. Hot applications were advised and these relieved the pain and swelling subsided. One month later same condition recurred and the same treatment was advised by another physician in the absence of Dr. Reilly. At the third month, when condition again recurred, a careful examination revealed an imperforate hymen which had caused obstruction to the menstrual flow. This was excised, at which time nearly two quarts of thin, bloody fluid escaped.

Dr. Reilly also reported a case in which a man had received a severe blow over the lower ribs. Examination revealed no fracture, no tumor, and the chest was about to be strapped for the pain when it was discovered that the patient was voiding bloody urine. At operation, rupture of the kidney was found. The case was cited to emphasize the importance of most careful examination in these cases.

Dr. Norton L. Wilson reported a case of a man 87 years of age who had been operated upon for glaucoma of the right eye six years previously, since which time cataract had developed in both eyes, with total loss of sight. He recently removed the cataract from the left eye, following which operation the elderly patient has been able to read.

Dr. F. A. Kinch read a paper entitled, "Some Malignant Conditions Within the Abdomen." He treated the subject in a very able manner, chiefly from the medical standpoint. This paper was extensively discussed by Drs. Green, Reilly and others.

The October meeting was held at Plainfield, N. J., when the question of the relations between physician and pharmacist, together with the subject of new preparations of the National Formulary, occupied most of the time. An array of beautiful preparations which had been manufactured by local druggists was exhibited and their merits discussed by some of the most able pharmacists of the county. Following this, Dr. T. H. Tomlinson presented a paper on "Food and Drug Adulteration," in which he reviewed most thoroughly the various practices in vogue in the past and the legislation necessary to combat these evils from time to time until the enactment of the present Pure Food and Drugs Act. This paper received a generous discussion.

The regular meeting, held in January, was well attended. Dr. J. P. Reilly reported a case in which a multilocular ovarian cyst complicating a five months' pregnancy, had suddenly sustained a twist in its pedicle, which condition then gave acute symptoms. The cyst was removed at operation and pregnancy advanced to full term.

Dr. T. F. Livengood and Dr. E. W. Hedges each reported cases of diphtheria with insidious development of membrane, and pointed out the fact that these cases were often very deceptive. Dr. Hedges reported an interesting case in which the condition of eclampsia had developed 24 hours after delivery of a primipara. After several convulsions the symptoms subsided only to recur again one week after confinement. The patient eventually made a complete recovery.

Dr. R. B. Whitehead reported a case of penetrating bullet wound of the abdomen in which the omentum had acted as a protective net and had wrapped itself about the bullet, thus aiding to stop its progress. There was only one wound

in the intestines.

The essayist for this meeting being ill, Dr. F. H. Pierson opened the discussion on the subject of anaesthesia. The discussion became general and was quite animated.

The annual meeting of the Society was held at the Elizabeth General Hospital on April 8th.

Dr. Wilson presented a case of mastoiditis with such extensive destruction of bone that it was necessary to remove the entire mastoid process and adjacent portions of necrosed temporal bone at least two inches from the process. A portion of the dura was destroyed and the purulent exudate was in direct contact with the pia mater covering the temporo-sphenoidal lobe. After operation the temperature never rose above 101°. It was feared that hernia of the brain might result from the extensive removal of bone, but the careful stitching of periosteum over the exposed area evidently prevented such occurrence, as the patient recovered with splendid result.

Dr. F. W. Sell reported a case in which death had resulted from the ingestion of orange peel. The patient was a child of 8 years.

Dr. Arthur Stern reported a case of extra-uterine pregnancy, complicating ovarian cyst.

Dr. T. F. Livengood reported a case of hydrochloric acid poisoning in which a complete cast of the larynx was coughed out. It was six months before the patient fully recovered.

Dr. E. W. Hedges reported a case in which a distended gall-bladder, containing stones, had given rise to symptoms of gastritis and asthma for the past six years. After operation upon the gall-bladder there was complete relief and patient was in splendid health.

The retiring president, Dr. H. R. Livengood, read an extremely able and interesting paper, entitled "Acute Abdominal Pain," which was largely discussed by the members present.

During the past year a goodly number of our members have journeyed to Trenton at different times to aid in the fight against the osteopathic and anti-vivisection bills. It is gratifying to know that so many could and would give their time to such cause and with such good result.

Probably the most prevalent disease in the county this year has been measles, of which we had a large number of cases.

We cannot help but feel that the work of our Society is progressing each year, and we trust that the ensuing year may prove no exception.

Respectfully submitted,

M. A. SHANGLE,  
Reporter.

Elizabeth, N. J., May 15, 1908.

**Dr. William Osler**, regius professor of medicine at Oxford University, has consented to contest for the lord rectorship of the university of Edinburgh in November as a nonparty candidate. He is the first physician ever nominated for the office.

In cases of fracture of the skull, one should wait for focal symptoms before operation, as a linear fracture without depression is often not followed by serious results. On the other hand, no time should be lost in raising a depressed piece of bone or exploring the skull for hemorrhage when any focal symptom presents itself.—*Amer. Jour. Surgery.*

## THE JERSEY CITY PRACTITIONERS CLUB.

The Jersey City Practitioners' Club held its Centennial Meeting on the evening of June 9 at Fraunces Tavern, corner of Broad and Pearl Streets, New York City. Nearly fifty sat down to dinner. Dr. Charles H. Purdy was toastmaster. A poem prepared for the occasion, was read by Dr. Henry Spence. Every member of the club and those taking part in the meeting were caricatured and none escaped a roasting. Dr. Frank Van Fleet, of New York, spoke on The Doctor as a Public Educator. Hon. J.S. Frelinghuysen referred to the medicos' work in enacting laws. Counsellor J. M. Noonan, of Jersey City, was in his happiest vein. Dr. T. R. Chambers was historian.

The occasion proved a most enjoyable and memorable jubilee.

### HISTORICAL ADDRESS.

By Talbot R. Chambers, M. D.

On May 13, 1897, a call signed by Drs. Rector, Spence and Chambers was sent to a limited number of men in Hudson County, to join in the formation of a small medical club. On May 21st, 1897, the meeting of organization was held in the old Hotel Washington, and the first regular meeting occurred the following October.

During the first year or two our methods and work were crude and primitive. The members unaccustomed to public speaking were self-conscious and diffident. However, we did good work. It was with great fear and trembling that we faced the future. Old Jersey Cityites prophesied short life to the attempt. But the men were loyal and determined and each did his best. Shortly a waiting list of applicants for admission proved our success. And within a few years three similar clubs sprang up in the county.

Only four of the charter members are missing: B. D. Craig, G. C. Kilgore, J. J. Broderick and J. J. Baumann. There have been no deaths. Seven have joined the Benedicts and six have added to the population during the decade.

In 1901 the membership was increased from eighteen to twenty-five and the club was incorporated. The three Reporters of Medicine, Surgery and Therapeutics were discontinued after a few years' trial and the time was devoted to the recital of interesting cases, which custom has continued to the present time.

Nineteen hundred and two was a hard year for the club. Four members were seriously ill. One was compelled to go away for his health and two joined the Appendectomy Club. One meeting failed to be held as the impending death of one member was momentarily expected. It was during this year that Dr. Gray was excused for a year's absence for study abroad.

In 1903 the records of the meetings were printed in *Gaillard's Monthly*. The club visited the filtration plant at Little Falls as guests of Dr. Leal. A committee was sent to confer with Mayor Fagan on improving the city Board of Health, and this committee was continued the next year. A committee on legislation did good work.

In 1905 a committee conferred with the New Jersey Pharmaceutical Society in regard to bettering the laws for the sale of poisonous drugs. The medical library idea which has grown so greatly, was started this year. Dr. W. Steadman resigned on account of ill health, but was granted a year's leave of absence.

In 1906, on April 10th, this club sent a subscription of \$50 to the professional brethren, sufferers in the San Francisco disaster. A committee conferred with the other Hudson County societies in regard to "fees." Dr. Sexsmith, who was president this year, established the rule that every man who should be called upon by the chair must positively get on his feet and do his share. No negative answer would go with him, and there were occasions when the shoe pinched. Another innovation of this year was when the subject for the meeting was "Mistakes in Practice," and every man called upon was compelled to stick to the subject. The year proved very valuable and interesting.

During the last three years the club has been largely represented in the committees visiting Trenton, to show to the legislators the intense interest and determination of the medical fraternity to stick together as a unit, when such questions as the Osteopath bill, the Pure Drug bill, the Board of Health bill or the Anti-Vivisection bill were presented.

The essay committee has managed so that every man has, at least once in three years, been allowed the privilege of reading a paper. No man has refused to do his part in the work of the club and each appointed to read has been on hand at the proper time with his paper and many most valuable efforts are, not merely on record only, but have borne good fruit. Research has been stimulated and our field of knowledge broadened.

As to reports of interesting cases since 1902, Drs. Dickinson has been recorded on his feet 31 times; Faison and Chambers, each 24; Spence and McLaughlin, each 21; Gray, 20; Blanchard, 18; W. Pyle, 15; Parsons, 14; Sexsmith, Bowyer and Forman, each 13; Rector, 11; E. T. Steadman, Lambert and Vreeland, each 9; Bull and Shera, each 7; I. Pyle, 6; Corwin and Exton, each 5; Gilchrist, Purdy and W. Steadman, each 4, and Abbott, 2 times.

During the eleven years of its life our club's members have stood high in the estimation of their confreres and neighbors and, banded together, have wielded an unmistakable influence for good in the shaping of affairs in this city and county. As Dr. Vreeland put it at the last meeting, we have been leaders and teachers of the people and oftentimes created public sentiment.

The club has been addressed at different times by outsiders. From New York have come the lamented C. W. Allen, D. B. Delavan, W. S. Gottheil, S. A. Knopf, E. LeFevre, Emil Mayer, Robert T. Morris, W. Gilman Thompson, J. E. Winters, C. P. Bulson and J. L. Corning, who presented us with our gavel. From Essex, Coit and Ill. From Hudson County the cloth has been represented by the Reverends D. J. Brady, C. Brett, W. R. Jenvy, C. L. Mead, F. Morgan, J. L. Scudder and G. C. Vogel. The lawyers have been Judges J. A. Blair, C. C. Black, W. H. Speer and R. Carey and Counsellors Otto Crouse, W. D. Edwards, E. A. S. Lewis, J. W. McCarthy, Flavel McGee and G. L. Record. Also the lamented Dr. Len. Gordon.

What has the club done for the State Medical Society?

Immediately on its formation it infused new life and interest into the county for the State Medical Society, as shown by the increased number in attendance and the more active part taken by men from Hudson County.

The County Medical Society at the time of the formation of this club was a society in name only.



It met once a year for the "feed" and incidentally to elect officers. It was a piece of machinery lying idle and rusting. It was composed of cliques. Members of one clique were unable to believe anything good of a member of another clique. Consequently bad feeling and discontent were rampant. Petty jealousies, lack of confidence and misunderstandings abounded. There was no dignity, unity nor harmony. Each clique pulled for itself and the devil for them all. It was this unstable condition which provoked the contempt of the profession, both within and outside of the county society. Laymen recognized the dismally disorganized condition of the profession. We all know the vicissitudes and embarrassments of the profession in Hudson County a dozen years ago. Progress was hindered by bickering or belligerency, often due to mere misunderstanding or imperfect acquaintance and leading to occurrences that were regrettable and sometimes even injurious to the advancement of scientific work or to the promotion of lasting harmony among the brethren.

What happened when this club took hold of the reins of the county society?

Its membership doubled in short order. A new order of business was instituted. Quarterly meetings were begun, which have continued ever since. Questions of scientific interest were and are presented and discussed. Questions of interest to the community held and still hold an important place in its deliberations. Seven of the ten years since 1898 has found one of the members of this club in the president's chair of the county society. The society has become a living force to dignify medicine and surgery as a profession, by elevating its mental, moral and material standing. It has put itself on record against quackery and the nostrum evil, thus establishing a more confidential relation with the honest pharmacist. It has been active in enlightening the public against disease and the causes of disease. Its membership (especially the Jersey City Practitioners' Club members) had to do with the building of the new city hospital and with the working of the regenerated city Board of Health. Thus, as Osler says, "The distinguishing features of the new era are unity, peace and concord, as well as a spirit of scientific progress."

Organization of all, from the small societies like ours to the county, State and national societies is what gives force and power to the demands of medical men.

Our society was incorporated to give dignity, permanence and increased usefulness to its deliberations, and it has compelled public respect. Happily for us, to-day, a pacific spirit prevails and the disposition to cultivate peace. Our doors are never closed to truth, and any honest thinker with a message is welcomed. In short, our temple is dedicated to truth, science and progress, and consecrated to peace, concord, good will and unity. So that those who come after us may say they built better than they knew.

Salicetti in the thirteenth century recognized that surgery could not be learned from books alone. His surgery contains many case-histories; for he felt that the good notes of cases are soundest foundation of good practice and others of that period felt the same way.

Many of our members have traveled abroad and in our country, studying the best methods by the best men; worshipping at the shrines of the Mayos in Rochester, Minnesota, the hospitals of New York, Boston, Philadelphia, Baltimore,

Washington and Chicago. And our men are to be found taking part in the national medical and surgical conventions.

The progress in biology and bacteriology, chemistry and physics and medicine and surgery has slowly but surely developed a class of scientific skeptics. The student of to-day takes nothing for granted. Every theory must be established on a scientific basis. The condition of student and preceptor of by-gone days is, indeed, a thing of the past. The laboratory finding is considered to-day the settling of any scientific controversy and yet, perhaps, it were better if there were a little more developing of the powers of observation and the drawing of correct conclusions from them. And here is where the retailing of interesting cases in our meetings serves a most admirable purpose.

Dr. L. E. Holt in a recent paper spoke of three general rules of guidance in professional work: (1) Love your work; (2) serve your patients; (3) treat your professional brethren generously. These are three cardinal principles which, though not spoken out aloud on every possible occasion, have been the golden rule backbone of the success of our Jersey City Practitioners' Club. We have recognized that real and lasting success rests now as ever, on honest work and personal worth.

And as we meet to-night in this place, saturated with the spirit of freedom, we feel Washington's benediction. We feel that in our club's eleven years each of us has been personally benefited, our profession has taken a higher stand, our patient, our neighbor, our city, our country are all the better for our having lived and worked.

Nor are we unmindful of our responsibilities for the future. We shall not rest on our laurels, but are determined that the next decade will achieve things still greater and grander.

## ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

### Attendance, Business Transacted, Social Events, Etc.

The Fifty-ninth Annual Session of the American Medical Association was held in Chicago, June 2 to 5. For the first time since the St. Paul meeting in 1901 the Association met in the centre of the country. To this fact, as well as to the greatly increased membership in the last few years is due the large attendance. Six thousand four hundred and forty-seven were registered. Including those Chicago members who did not register, there were at least 500 in attendance whose names do not appear on the registration list. Adding the guests, exhibitors, etc., the actual number of persons in attendance must have exceeded 15,000. The weather was of that well-nigh perfect brand that Chicago can exhibit at times, being bright and clear, yet pleasantly cool and bracing. The general headquarters and registration offices were located in the First Regiment Armory at Sixteenth and Michigan Avenue, where were also found the sections on Stomatology and Pathology and Physiology, as well as the House of Delegates, Commercial Exhibit, Scientific Exhibit, etc. This building, one of the finest national guard armories in the country, served admirably for convention purposes. The meeting places for the other ten sections were the First and Second Presbyterian

Churches, Sinai Temple, the Calumet Club and Grace Church Parish House, all within a few blocks of the general headquarters and the orchestra hall in the downtown district, in which the section on Surgery and Anatomy met. This hall, one of the handsomest auditoriums in the city, seats 2,500 and was supposed to be ample for the meetings of this section, yet it was on several occasions inadequate, being crowded to the doors.

The House of Delegates was called to order on Monday morning at 10 o'clock by the president, Dr. Joseph D. Bryant of New York, who in his presidential address commended the work of the Council on Pharmacy and Chemistry as well as that done by Dr. McCormack in educating the public. He also recommended that a standing committee be established to elaborate the ethical principles underlying the practice of medicine and that general instruction in ethical medicine be made a part of the undergraduate course. He dwelt particularly on the efforts now being made to restrict animal experimentation and recommended action by the House of Delegates on this subject. Dr. Bryant also called attention to the invitation extended by President Roosevelt to him as President of the American Medical Association, to take part in the conference recently held at Washington on the Conservation of Natural Resources.

The report of the General Secretary showed that the membership of the Association on May 1, 1908 was 31,343, a net gain for the past year of 3,828. The reports received from state associations regarding the organization of branch associations showed that two states had voted in favor of their establishment, seven had voted against and the remainder had at the time of publication of the report taken no action. The appointment of a committee to consider uniform provisions for the regulation of county, state and American Medical Association membership was recommended. A communication was presented from the secretary of the American Association for the Advancement of Science asking that the American Medical Association appoint representatives to the Council of that body.

The report of the Board of Trustees included the customary report from the auditing company, showing that the entire business for the fiscal year of 1907 was \$385,030.89; that the total expenditures of the year had amounted to \$356,222.21, leaving a net revenue for the year of \$28,808.68. Detailed statements of all the various accounts of the Association's business were given showing the items in each case. The report showed that during 1907, 2,715,293 copies of THE JOURNAL had been issued, forming a weekly average of 52,217, an increase of 12½% over 1906.

The Committee on Medical legislation reported that the Army Medical Reorganization Bill and the Carroll-Lazear Pension Bills had become laws during the last session of Congress. The importance of uniform and adequate legislation on the practice of medicine and the preservation of public health, was emphasized as well as the necessity of careful study of the problems involved. The Committee recommended that pending the completion of the work now being done, only those changes in existing laws which are imperatively needed should be attempted by state associations. The formulation of the Vital Statistics Bill endorsed by the United States Census Department, the American Public Health Association, the Conference on Uniform State Laws

of the American Bar Association and the American Statistical Association, was reported and the endorsement of the House of Delegates was asked for this measure. The report of the Chicago Conference on Medical Legislation was also given.

The Council on Medical Education reported that the work of the Council during the past year had been along the following lines: 1. The inspection and classification of medical colleges as (a) acceptable, (b) doubtful and (c) unsatisfactory; 2. The conducting of an annual conference with representatives of state examining boards and leading educators for the discussion of the important problems of medical education and medical licensure; 3. The collection and compilation of data regarding (a) Medical college students and graduates and (b) regarding results of state license examinations; 4. A thorough investigation of preliminary and medical education in Europe; 5. Working for the advancement of the requirement of preliminary education in the United States to include a year's work in physics, chemistry, biology and modern languages; 6. Obtaining accurate information regarding high schools and universities in their relation to medical education.

The Board of Public Instruction reported that it had secured a secretary, Dr. R. Max Goepf of Philadelphia, and that it was considering the establishment of lecture systems and of state boards of public instruction and intended to publish articles in the magazines and public press for the enlightenment of the public on disease.

The Committee on Ophthalmia Neonatorum advised the enactment of laws in each state regarding the registration of births and placing the control of midwives in the hands of the boards of health; that health boards distribute circulars to midwives and mothers on the dangers and prophylaxis of this disease; that state and local boards of health prepare and distribute proper prophylactic solutions with specific directions for their use; that proper records be maintained in all hospitals in which children are born; that periodic reports be made by all physicians to boards of health; that concerted effort be made along the lines of public education throughout the country. This report was approved by the chairmen of the Sections on Ophthalmology, Obstetrics and Diseases of Women and Hygiene and Sanitary Science.

The Committee on Scientific Research recommended the appropriation of \$200 for the investigation of each of the following subjects: "An Experimental Study of Cerebral Thrombosis;" "Chemistry of the Parathyroid Glands;" "A Study of the Etiology of Mumps;" "A Study of the Elimination of Inorganic Salts in a Case of Chronic Universal Edema of Unknown Etiology with Apparent Recovery;" "An Investigation of the Identity of the Rocky Mountain Fever of Idaho with that found in Western Montana."

On Tuesday afternoon, at the third meeting of the House, the reports of the Reference Committees were taken up, the Reference Committee on Medical Education approving the work of the Council on Medical Education and recommending that it be continued. The Reference Committee on Reports of Officers recommended the appointment of a committee of five to consider the elaboration of the Principles of Ethics. Resolutions condemning the legislative efforts to restrict animal experimentation were presented. The ac-



tion of the Board of Trustees in preparing the second edition of the Directory approved. The Reference Committee on Legislation and Political Action recommended the approval of the model law for vital statistics, which recommendation was adopted. The resolution presented by Dr. A. T. McCormack of Kentucky, requesting all state associations publishing or controlling medical journals to restrict advertisements to such preparations as were approved by the Council on Pharmacy and Chemistry was adopted. A committee of three to confer with a like committee from the American Pharmaceutical Association in regard to drug reforms was authorized. The candidacy of Dr. C. A. L. Reed, of Cincinnati, for the United States Senate was endorsed.

On Thursday afternoon the annual election took place with the following results:

President—Dr. William C. Gorgas, Ancon, Panama; First Vice-President—Dr. Thomas Jefferson Murray, Butte, Montana; Second Vice-President—Dr. John A. Hatchett, El Reno, Okla.; Third Vice-President—Dr. Thomas A. Woodruff, Chicago, Ill.; Fourth Vice-President—Dr. F. N. Hall, Woodburn, Ky.; General Secretary—Dr. George H. Simmons, Chicago, Ill., re-elected; Treasurer—Dr. Frank Billings, Chicago, Ill., re-elected; Trustees to serve until 1911—Dr. Wisner H. Townsend, New York; Dr. Philip Mills Jones, San Francisco; Dr. William T. Sarles, Sparta, Wis.

Nominations were made by the President and confirmed by the House of Delegates for the following: Committee on Medical Legislation, Council on Medical Education, Committee on Transportation and Place of Session.

The following were elected honorary members:

Dr. Edward F. Schaefer, Edinburgh, Scotland; Dr. August Martin, Greifswald, Germany; Dr. F. Treacher Collins, London, England.

The Committee on Awards, in accordance with the report of the Committee on Scientific Exhibits, awarded one gold medal and nine diplomas to ten physicians, and gave honorable mention to five institutions for valuable exhibits.

The Committee on Transportation and Place of Session recommended Atlantic City as the next meeting place, which choice was agreed to by the House of Delegates. The Reference Committee on Legislation and Political Action reported, requesting the Committee on Medical Legislation to arrange for a conference with the Committee of One Hundred, the Surgeon-Generals of the Army, Navy and Public Health and Marine-Hospital Services, with a view to securing cooperation on the establishment of a National Department of Health. After the transaction of some routine business the House adjourned.

One hundred and thirty-four members of the House were present out of a total membership of one hundred and forty-two. The meetings of the House were better attended than at any time since its organization. The business was dispatched with accuracy and rapidity, the most notable being the reference of resolutions, communications, etc., to the appropriate reference committees without discussion, reserving the consideration of the questions involved until the reference committee had considered the matter and submitted a report.

The social events of the week were particularly attractive. On Monday night the secretaries of the state associations and the editors of the state journals met at dinner and completed the organi-

zation of a state secretaries and editors association. A dinner to foreign guests as well as a number of other social events also occurred on Monday evening. On Tuesday evening twenty-seven alumni dinners were held in the various hotels and restaurants throughout the city, the largest being that of the Northwestern University Medical School held at the Illinois Athletic Club, at which over 800 alumni were present. On Wednesday evening the president's reception and ball was held at the Coliseum, thousands of members and guests being present. On Thursday evening the local profession tendered the members of the association a smoker at the Coliseum at which the attendance amounted to about 8,000. Numerous social attractions were provided during the day for the ladies and guests including receptions at the South Shore Country Club, Chicago Women's Club, etc. The sections were all largely attended and the programs were of a high order. The session was in every way the most noteworthy of any which has yet been held and it is anticipated that some years will elapse before the record established will be surpassed.

## PHILADELPHIA ACADEMY OF SURGERY.

### The Samuel D. Gross Prize of Fifteen Hundred Dollars.

The Trustees—Drs. Taylor, Harte and Willard, give notice of the prize as follows:

The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in Surgical Pathology or Surgical Practice, founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery.

The essays which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th St., Philadelphia," on or before January 1, 1910. Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

**Surgery in Partial Vacuum.**—Dr. Sauerbruch of the University of Marburg recently demonstrated before the staff of the Rockefeller Institute, his method of performing chest operations in a glass operating cage in which the normal atmospheric pressure had been reduced, so as to prevent collapse of the lungs.

**Hospital Struck by Lightning.**—The Newark Tuberculosis Hospital on the top of Mt. Caldwell, at Verona, N. J., was struck by lightning on June 24, causing a small panic among the inmates. As the building is fireproof no serious harm resulted.

# THE JOURNAL

OF THE

## Medical Society of New Jersey.

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**AUGUST, 1908.**


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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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We noted two errors in our last issue and must ask our readers to make allowance for any additional ones that may occur, or for any deficiencies in THE JOURNAL during the next month or two. The printing office from which our journal is issued has recently undergone entire change of ownership and pressmen, and it may require a short time to secure that degree of regularity and perfection which we desire. We take this occasion to express our appreciation of the good work promptly done by, and the courteous and liberal treatment we always received from the Messrs. Baldwin under the former management. We believe, under the present administration, with the enlarged equipment of the plant and our knowledge of its owners, that we shall not have cause to complain of the quality of the work or the treatment we shall receive. Indulging that belief, we congratulate the members of the new firm and bespeak their coöperation in our effort to make THE JOURNAL, in matter worthy of our Society, and in appearance to reflect credit on the new Chronicle Publishing Company.

Our rule has been to give preference in the issues of THE JOURNAL following the annual meeting of our Society to the insertion of the orations, papers, etc., presented at that meeting, as far as possible in their order. We are compelled to deviate somewhat from that rule this year, partly because

of the changes above referred to, but principally because of delay in receiving report of discussions and the difficulty we have experienced in securing prompt return of proof sent to authors for correction. We therefore admit some papers read before county societies in this issue—as they were already in type. We shall proceed in regular order, as far as possible, with the September issue. In order to do so we ask authors receiving proof to give it prompt attention and return it at once to the Editor direct.

The greater part of the Official Transactions of the annual meeting of the State Society are inserted in this issue of THE JOURNAL, the balance will appear in the September issue. This accounts for the omission of some other items of interest. We especially regret the delay in giving our readers Dr. Linn Emerson's paper on "The Relative Importance of the Fitting of Glasses in Ophthalmic Practice," which will appear in our next issue.

### INCREASING MEMBERSHIP.

Almost every component society has a number of delinquent members—that is, men who have been members and would be now in good standing if they had continued regularly to pay their dues. We are reminded of this in the complaints which come to us about members not receiving their JOURNALS. Most of these cases can be explained by the fact that these members have not as yet paid their dues for this current year.

The total number of such delinquents is not large. Indeed, it is small compared with the number of regular physicians practising right about us but never having as yet joined our county societies. Here is a chance for a little missionary work. Last year Hudson county society set a noble example by increasing her membership nearly twenty-five per cent. How many are going to equal this or do even better? As you meet these men invite them to join your society. It will open to them the doors of the



State Society and the American Medical Association. It will give them a most excellent journal free of additional cost and, if you make your county society what it ought to be, it will insure to them and to you a manifold return for the time and money expended. Which society is going to head the list this year? W. J. C.

The Editor heartily endorses the above suggestions and congratulates the Hudson county society, for the splendid work done in increasing her membership; but do not let us forget the smaller society which, in proportion to numbers, has done a little better—increasing her membership more than thirty-five per cent. All honor to the Ocean county society also.

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### GUARDING THE HEALTH INTERESTS OF NEW JERSEY.

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#### Shall the Lives of Our Citizens be Jeopardized?

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The Editor desires to call the special attention of the members of our Society to the resolutions which he felt compelled to offer at the recent annual meeting of our State Society against the recent legislation reorganizing the State Board of Health, which resolutions he is pleased to say were adopted by a unanimous vote, and which should be followed by the active coöperation of every member with the committees having the matter in charge, for the correction of what we believe was a decided retrograde step which will reflect discredit upon our State and will jeopardize its highest health interests. The resolutions will be found on page 154 of this issue of *THE JOURNAL*.

The law referred to was passed by the legislature for the purpose of reorganizing the State Board of Health. It makes no changes in the health laws, but merely gives the Governor authority to appoint new men as members of the board. The act was not approved by the old board, or by sanitarians generally who are conversant with more re-

cent methods of sanitary administration; its defects were pointed out to the Governor, but it was finally passed in the closing hours of the session, practically without discussion. The bill which was advocated by Judge Lanning, which met the approval of most if not all the members of the State Board of Health, was designed to improve the service by providing a better system for the administration of the laws and more adequate authority for action in preventing the spread of infectious diseases. In the States of New York and Pennsylvania notable progress has been made during the past few years in improving methods for the enforcement of the health laws, and the Lanning Bill was drawn to give to New Jersey the benefit of the experience gained in the States referred to, and also to cause the system employed to be in accord with the best practice in Europe. The most important features of the Lanning Bill are those which provide for a single-headed commission and the division of the work into sections or bureaus which may include all of the departments of the State government which have direct relation to the public health.

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We give in outline the Lanning Bill, as follows:

Section 1 creates a State department of health; provides for a Commissioner of Health and an advisory board.

Section 2. The commissioner to be appointed by the Governor; his term of office to be five years and his salary to be \$5,000.

Section 3. The advisory board of five members to be appointed by the Governor. No salaries.

Section 4. Fixes duties of the commissioners.

Section 5. Authorizes employment of clerical and other assistants.

Section 6. Creates bureaus in the department of health.

Section 7. Transfers powers and duties of the State Board of Health to the State department of health.

Section 8. Pending suits not to be affected by the new legislation.

Section 9. Provides for expenditure of appropriations.

Section 10. Reports to be made.

## Section 11. Appropriations.

The entire bill will be found in the June JOURNAL, page 40.

The Medical Society of New Jersey has a *right* to express its judgment on legislation concerning the health interests of this State. This Society not only took the initiative in such legislation but carried on a vigorous and persistent campaign for more than twenty-six years to secure from the legislature a law creating a State Board of Health, which was finally organized in 1877. Five of the seven members appointed were prominent members of our Society, and that proportion was continued for more than a quarter of a century; its presidents and secretaries have all been members of our Society until this year—1908. The guarding of the health interests of our State furnish interesting chapters in our history. We refer to the president's historical address—1895 Vol. of Transactions pp. 152-156. It is a singular coincidence that the historical data was detailed at Cape May where this year's action was taken.

When we call attention to the fact that the present State board of health, as re-organized this year—under the recently enacted law, has as its only member representing the medical profession a homeopathic physician who, we are informed, has not been in active practice for the past ten or twelve years and has had no practical experience in sanitary administration, the Medical Society of New Jersey has not only the *right to express its judgment*, but it is its *imperative duty*, not only to protest but also to *act* for the protection of the health and the lives of the citizens of New Jersey.

It is a satisfaction to know that the Society has by *unanimous vote decided to act*. Our only question is to consider well what is for the best interest of our citizens, and for this purpose a committee has been appointed to determine, with the endorsement of the Board of Trustees, upon a proper course of action.

For the resolutions adopted and the discussion thereon we refer all interested to

the minutes of our last meeting which will be found on pages 154-156 of this issue of THE JOURNAL.

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**WILLIAM ELMER, M. D.**

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It is with sadness and deep regret we report the death of another Fellow—ex-president, of the Medical Society of New Jersey—William Elmer, M. D., of Trenton, who was elected president in 1895; presided at the annual meeting in 1896; and since then has served as a trustee, until his death, at Atlantic City, June 18, 1908.

Dr. Elmer was known to most of the members of our State Society, well known by all who have been active in its councils during the past forty years, and none knew him well who did not esteem him very highly. The editor of the JOURNAL, having had the privilege of knowing him well during these forty years would bear brief tribute to his memory—it is not necessary to say much for the life, so well known, speaks eloquently; suffice it to say: there was no member of our Society whom we more highly esteemed; no friend whose friendship was more prized; no man was more true, modest, gentle yet strong and manly than William Elmer. He was an able, beloved physician, descended from a long line of able and honorable physicians; he was a Christian gentleman. He served our State Society faithfully and the Society honored itself in honoring him by election to the presidency. We shall miss him from our councils, but we shall not lose the good influences of his life.

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**Raise Entrance Requirements.**—Jefferson Medical College, the Medico-Chirurgical College, Hahnemann Medical College, the Woman's Medical College of Pennsylvania, and Temple University, have notified the Pennsylvania State Medical Council that hereafter only such students as have pursued at least a full four years' academic or high school course shall be eligible for the medical course. It is stated also that the Western University of Pennsylvania at Pittsburg will shortly or in the next year adopt a similar minimum entrance requirement. The University of Pennsylvania has already made announcement that it will receive in its medical department only students who have passed at least one year of the college course.



### AMERICAN PROCTOLOGIC SOCIETY.

The tenth annual meeting was held at Chicago, Ill., June 1 and 2, 1908, President Dr. A. Bennett Cooke in the chair. The following officers were elected: President, Geo. B. Evans, M. D., Dayton, Ohio; Vice-president, John L. Jelks, M. D., Memphis, Tenn.; secretary and treasurer, Lewis H. Adler, Jr., M. D., Philadelphia, Pa. Executive Council: A. B. Cooke, M. D., chairman, Nashville, Tenn.; Geo. B. Evans, M. D., Dayton, Ohio; Samuel T. Earle, Jr., M. D., Baltimore, Md.; Lewis H. Adler, Jr., M. D., Philadelphia, Pa.

The place of meeting for 1909 is Atlantic City, N. J., May 31st and June, 1, 1909.

The president, Dr. A. Bennett Cooke, of Nashville, Tenn., delivered the annual address. After briefly reviewing the organization and early history of the Society, he proceeded to trace some of the results which had been accomplished in the ten years of the Society's existence, chief among which was emphasized the assured position as a legitimate dignified and important specialty which is now universally accorded to proctology.

The objects of the Society as defined in its constitution are the acquiring and dissemination of knowledge relating to this special field. The speaker inquired if the Society was living up to the full measure of its possibilities in regard to the second object, i. e., the dissemination of knowledge, arguing that such was not the case. As the means of correcting this defect, he suggested: 1st. That an official organ be adopted or established and a full report of the scientific proceedings of each meeting published; 2nd. That the possibility and advisability of becoming a section of the A. M. A. be seriously considered. The advantages and disadvantages of the latter suggestion were fully discussed, the opinion being expressed that what the Society would lose in independence and individuality would be more than gained in the wider sphere of influence and usefulness opened up by this more liberal policy.

The following papers were presented and discussed: "The Treatment of Choice of Stricture of the Rectum," by Dr. W. M. Beach, of Pittsburgh, Pa.; "Amebiasis; its Symptomatology, Diagnosis, Sequelæ and the Use of Formalin and Copper Phenol Sulphonate in the Treatment," by Dr. J. L. Jelks, Memphis, Tenn.; "Some Recent Contributions to the Physiology of the Rectum," by Dr. S. T. Earle, Jr., Baltimore, Md.; "Plate and False Teeth in Sigmoid; a Case," by Dr. Earle; "Galvanic Electricity in the Treatment of Hemorrhoids, Fissure, Prolapse, Ulceration, and Non-malignant Stricture of the Rectum," by Dr. W. L. Dickinson, Saginaw, Wis.; "Dysentery," by Dr. J. M. Matthews, Louisville, Ky.; "The Choice of an Anæsthetic in Rectal Surgery," by Dr. J. M. Lynch, New York City; "Surgery of Specific Diseases of the Rectum," by Dr. G. B. Evans, Dayton, Ohio; "Six Cases of Profound Secondary Anæmia due to bleeding external Hemorrhoids, and One Case of Necrosis of the Rectum as a Result of Self-treatment," by Dr. D. H. Murray, Syracuse, N. Y., (he also exhibited a new examining speculum); "Spontaneous Intestinal Anastomosis," by Dr. J. P. Tuttle, New York City; "Mesosigmoidopexy, with Report of Two Cases," by Dr. L. J. Hirschman, Detroit, Mich.; "Carcinoma of the Rectum; Comparative Results of Operative Procedures," by Dr. J. R. Pennington, Chicago, Ill.; "Primary

Melanotic Sarcoma of the Rectum and Anus, With Report of Two Cases," by Dr. L. J. Krouse, Cincinnati, Ohio; "Some Colonic, Sigmoidal and Rectal Conditions," by Dr. E. A. Hamilton, Columbus, Ohio; "Rectal Diseases: Three Cases; Condyloma, Lipoma and Foreign Body," by Dr. L. H. Adler, Jr., Philadelphia, Pa.

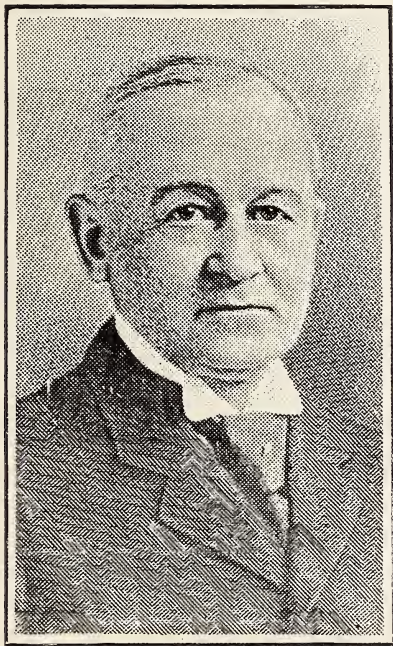
[We are indebted to Dr. Adler, the secretary, for brief abstracts of these papers, but regret that, under our rules, which require the early insertion of papers presented at our State Society annual meeting, as well as others which we had agreed to insert, we cannot at present use these abstracts. We may possibly do so later.—Ed.]

### Medical Treatment of Gall Stone Disease.—

Dr. Reynold Webb Wilcox said that about eighteen months ago, when he read a paper on this subject before one of the national societies, one of the surgeons who participated in the discussion had expressed surprise that he had said anything about dissolving gall stone *in situ*. Still, one should not lose sight of the fact that this theory gained a firm foothold among the older writers, and that the use of Durande's mixture of turpentine and ether was sometimes followed by a cessation of symptoms for many years. The speaker said that the use of olive oil followed by high colonic irrigation with ice water had brought relief for long periods. While the number of cases thus relieved was comparatively small, we should bear in mind the fact that in from six to ten per cent. of all cadavers, gall stones were found, and that fully three-fourths of these were in persons over fifty years of age, and that of these not more than five per cent. of the cases in which gall stones were found gave any antecedent history of gall stone disease. Therefore the cessation of symptoms was not evidence that gall stones had been dissolved. The treatment of gall stones, Dr. Wilcox said, was absolutely surgical, first, last, and always, but the treatment of gall stone disease had nothing whatever to do with surgery. The latter was the treatment of the condition of which gall stones were the final expression, and when the gall stones had been removed by surgical means, then came the treatment that would prevent the formation of more stones. There were two principal varieties of gall stones: (1) The calcium-bilirubin stones, which were formed in the biliary passages in the liver; (2) those of cholesterolin, which were undoubtedly formed in the gall bladder. That the calcium-bilirubin calculi were formed in the liver ducts was proven (1) by the fact that after the gall bladder and ducts had been cleaned out by a cholecystotomy, gall stones of this variety had continued to be passed through the biliary fistula; (2) that in abscess of the liver, gall stones of the calcium-bilirubin variety of such size had been found that they could only have been formed *in situ*; (3) that the Roentgen-ray plates of Dr. Carl Beck showed gall stones of the calcium-bilirubin variety in the liver itself; (4) the gall bladder having been removed, attacks of biliary colic might continue. As to the modes of infection which gave rise to gall stones, we had (1) those from the intestinal canal, and (2) those from the portal vein, and the problem that we had to solve was to remove all conditions which caused a congestion of the portal system, and particularly those which favored systemic infection of the liver and produced stagnation of viscosity

of the bile. The drugs that were indicated were those which caused elimination of the bile through the hepatic cells, and exerted a disinfectant action. Dr. Wilcox then gave a brief outline of his method of treatment in gall stone disease, together with an extensive dietary program. He emphasized the importance of frequent meals in order to secure a pretty free flow of bile. The main point in the medical treatment was to do everything possible to remove all sources of congestion and inflammation of the portal system, and this might be materially aided by massage and exercises, both resistive and mechanical.—*N. Y. Medical Record* (Jan. 4).

## Obituaries.



*By Courtesy of the Trenton Times.*

### WILLIAM ELMER, M. D.

William Elmer, M. D., the subject of this sketch, was stricken with mortal illness on September 25th, 1907, at his residence, No. 44 West State street, Trenton, N. J. While taking his usual morning bath, he was seized with severe heart-pang and accompanying symptoms of what was believed to be a thrombus of the right coronary artery. From a man of robust health, full of vigor and without the symptom of a disease, he was in an instant transformed into a helpless, hopeless invalid. Dilatation, regurgitation and the long, tedious train of conditions which mark the progress of organic heart disease, followed in painful succession until death peacefully ended the struggle at Galen Hall, Atlantic City, on the morning of July 18th, 1908.

To those who knew Dr. Elmer, it is needless to say that he passed through this trial with that calm, cheerful resignation which was but a part of his character. There was never a groan, a murmur, or a single rebellious word or thought. With his Testament ever beside him on his bed,

he took comfort from its sacred pages. His thoughts were ever of mercy and charity for others, which so characterized the works of his life.

Some of his last words and expressions were those of interest in Mercer Hospital, in which and for which he labored so arduously during the active years of his life and from which, now that he is gone, his helpful hand and sympathetic heart will be irreparably missed. He was always ready to hold out the friendly hand of welcome to the new-comer, always had a kindly word for his competitor, never resented the unfair treatment of a rival, always did his duty fearlessly, faithfully and unswervingly; he was a man, big, generous and true. The community in which he lived and worked, the institutions with which he was connected, will miss him, and his friends and co-workers will mourn and sorrow over his loss. A noble life, well rounded out with good works and good deeds, is ended. Peace be to his ashes and rest eternal to his soul.

Dr. Elmer was born of a long ancestry distinguished in the medical profession as well as in public life, in Bridgeton, New Jersey, on the 14th day of December, 1840. His father, grandfather and great-grandfather were all men eminent in the practice of medicine and prominent in the public affairs of their day and generation. After receiving his preparatory education in the West Jersey Academy of his native town, Dr. Elmer entered Princeton University, from which institution he was graduated in 1861. In 1864 he received his degree of M. D. from the University of Pennsylvania. A few years later he began the practice of medicine in Trenton, N. J., and passed the remainder of his life in active work in that city.

We are all familiar with the honors he received from our state and county societies, as well as the faithfulness with which he performed every duty. In every capacity he displayed those qualities and characteristics which have made his family prominent in the history of New Jersey.

Dr. Elmer was married September 29th, 1869, to Miss Alice Gray, at Columbia, Pa., who died November 17th, 1888. Four children were born to this marriage: William, holding a high position in the civil engineering department of the Pennsylvania railroad; Walter Gray, a rising surgeon of Philadelphia; Arthur Read, holding a position of responsibility and trust in a large banking house of Philadelphia, and Alice Gray, at present remaining at the old home.

On December 25th, 1899, Dr. Elmer was married to Miss Emma Burke at New Orleans, La., who survives him. No children were born to this marriage.

W. A. C.

The President, Dr. David St. John, appointed the following committee to represent the Medical Society of New Jersey at the funeral of Dr. Wm. Elmer, of Trenton: Drs. David C. English, John W. Ward, Thomas J. Smith, Philip Marvel and Wm. J. Chandler.

DANIEL M. STOUT, M. D. Jefferson Medical College, Philadelphia, 1847; a member of the Medical Society of New Jersey; died at his home in Berlin, N. J., July 10, aged 82.



## Personal.

Dr. David St. John, of Hackensack, our president, is sojourning for a short time at North Elba, Essex county, N. Y.

Dr. E. L. B. Godfrey, of Camden, is enjoying a trip through Canada.

Dr. Ellis W. Hedges, of Plainfield, has been enjoying his vacation at The Bluffs, Bayhead, N. J. He returns about August 1st.

Dr. Alexander Marcy, Jr., of Riverton, is in Europe; he attended the annual meeting of the British Medical Society at Sheffield, England.

Dr. William K. Netwon, of Paterson, is also enjoying his vacation in Europe.

## BOOK REVIEW.

**SURGERY** BY JOHN ALLAN WYETH, M. D., L. L. D., President N. Y. Acad. Med., ex-President American Medical Association, etc., etc. Eight hundred and sixty-four illustrations. Marion Sims Wyeth & Co., Publishers, New York, 1908. Price, \$6.00 including postage or express charges. Sold by subscription.

Wyeth's Surgery, in several editions, has long been one of the standard works on surgery. This last edition has been carefully re-written and brought thoroughly up to date. Major operations are concisely described and the details of many minor operations are noted. The eight hundred and twenty-eight pages of the book are full of practical thought valuable alike to the student and to the active practitioner. The device of the gifted author for controlling hemorrhage in amputations at the shoulder and hip joints is clearly described. The technique of abdominal operations is quite fully and yet concisely stated for the general surgeon. Many of the illustrations are colored thereby adding much to the appearances and value of the work. We predict a large sale for this excellent volume.

**BORDERLAND STUDIES.** Miscellaneous Addresses Pertaining to Medicine and the Medical Profession, and Their Relation to General Science and Thought. Volume II. By George M. Gould, M. D., formerly Editor of the *Medical News*, the *Philadelphia Medical Journal*, *American Medicine*; Author of a Series of Medical Dictionaries, etc. Philadelphia: P. Blakiston's Son & Co., 1908.

It has been our pleasure to read some of these essays as they have appeared heretofore in medical and other journals, and found them worthy of the careful consideration Dr. Gould's contribution to literature generally receive. They have been wisely placed in more permanent form for reference and study. The fourteen chapters are on various medical and sociological subjects. We refer to only a few. "The History of the House," tracing the development of our dwellings from early times to the present, and their relations to health and disease. In "The Seven Deadly Sins of Civilization" the author discusses tobacco, alcohol, sugar, tea and coffee, venereal diseases, the modern house and eye strain in their relation to disease. In the chapter on "Disease and Sin," after forcefully presenting their relation, in arguing that as good physicians and good citizens we should join in social movements for the bettering of conditions, the author says: "The man who says his sole duty is to cure disease, not to bother about sin or society is a bad physician

and a poor citizen." In "Intellectual Weeds of American Growth," Christian Science, New Thought, Mental Healing and other isms are ably discussed. Other chapters, such as those on "The Life Study of Patients," "Cranks, Dotards, Criminal and Insane Physicians, etc.," "Child Fetiches," "Vocation or Avocation," etc., are well written, and while some may not always agree with the author, they will admire his clear and forceful presentation of the subject discussed.

The book is worthy a place in the physician's library and will repay careful perusal and provide food for thought which ought to prove helpful to the doctor and his patients.

## BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

### Monthly Statement of Mortality, June, 1908.

David S. South, Registrar.

The number of deaths reported to the Bureau of Vital Statistics during the month ending June 15, 1908, was 2,628, an increase of 26 over the previous month and 77 less than the corresponding period last year.

The deaths under one year numbered 444; over one year and under 5 years, 249; 60 years and over, 768. The number of deaths from typhoid fever (18) is lower than for any period during the last twelve months. The following shows deaths from typhoid for the period of time mentioned: 1907: July, 22; August, 32, September, 55; October, 51; November, 46; December, 39; January, 1908, 49; February, 39; March, 35; April, 37; May, 28; June 18.

The number of certificates of death received in the State Bureau of Vital Statistics during the month ending June 15, 1908, compared with the average for the previous twelve months are as follows. Said average for the various causes of death are given in brackets:

Typhoid fever, 18, (38); measles, 23, (14); scarlet fever, 48, (32); whooping cough, 21, (21); diphtheria, 41, (51); malarial fever, 1, (2); tuberculosis of lungs, 306, (299); tuberculosis of other organs, 47, (51); cancer, 121, (121); Cerebro spinal meningitis, 22, (31); Diseases of nervous system, 345, (372); diseases of circulatory system, 289, (321); diseases of respiratory system, (pneumonia and tuberculosis excepted), 152, (179); Pneumonia, 218, (261); infantile diarrhoea, 66, (205); diseases of digestive system, infantile diarrhoea excepted, 159, (195); brights disease, 190, (212); suicide, 42, (34); all other diseases or causes of death, 519, (690); totals, 2,628, (3028).

**Foods and Drugs.**—During the month ending June 30, 1908, 651 samples of food and drugs were examined in the State Laboratory of Hygiene. The following are the leading articles found to be below the standard: Milk, 36 specimens out of 315 examined; butter, 2 out of 7; cider vinegar, 18 out of 50; extract of lemon, 2 out of 3. All specimens of cocoa, corn starch, cream, flour, lard, honey, molasses, cream tartar, ground ginger, mace and pepper were above the standard. Sixty-seven specimens of water were examined.

**Specimens for Bacteriological Diagnosis.**—From suspected cases of diphtheria, 159; tuberculosis, 320; typhoid fever, 162; malaria, 22; miscellaneous, 11; total, 674.

## OFFICIAL TRANSACTIONS.

### Minutes of the Proceedings of the Medical Society of New Jersey at its 142d Annual Meeting, held at the Hotel Cape May, Cape May, June 18-20, 1908.

#### FIRST DAY.

*Thursday, June 18, Morning Session.*

##### MEETING OF THE HOUSE OF DELEGATES.

The meeting of the House of Delegates was called to order by the President, Dr. Edward J. Ill, of Newark, at 10:40 A. M.

Dr. Strock being delayed, it was moved, seconded, and carried that the reading of the report of the Committee on Credentials be deferred, and that the Society proceed with the next business on the program, viz., the reading of the minutes of the last annual meeting.

Dr. Chandler made a motion that the reading of the minutes be dispensed with, and that the minutes as printed in the Supplement to the JOURNAL for August, 1907, be approved, striking out the name of Dr. T. H. Tomlinson, of Plainfield, from the list of Permanent Delegate absentees, Dr. Tomlinson having been present at the meeting, and his name having been entered in the registration book. The motion was seconded and carried.

The report of the Committee on Credentials was read by Dr. Strock, the Chairman, who reported as present eleven Fellows, four Officers, seventeen Permanent Delegates, thirteen Annual Delegates, and eight Associate Delegates, making a total of fifty-three.

It was moved, and seconded, that the report be received.

##### REPORT OF THE COMMITTEE ON ARRANGEMENTS.

The Committee on Arrangements respectfully gives account of its stewardship by informing you that it has endeavored to fulfil the mandate of the By-Laws contained in the provision that "it shall be the duty of this committee to provide suitable accommodations for the meeting place of the Society," and it points with gratification to this magnificent building, with the evidences of elegance and comfort on every side, where, we feel assured, you will pass with pleasure and satisfaction the few days allotted to the purposes of this meeting. The committee desires to make acknowledgment of the fact that to Dr. Alexander Marcy, Jr., a fellow, the Society is indebted for the suggestion of this city and house as a meeting place.

It is probably not necessary to remind you that the time of the meeting was changed, by the Trustees, upon the recommendation of the Committee on Arrangements, and for that reason we are in session at the close of the week for the first time in recent years, at least. Rarely, in the history of the Society, has there been so large an attendance at the first session, and it may be well to repeat this innovation from time to time.

In the name of the committee that has wrought for you, I extend a welcome to this historical old town, now being made new, and venture to express the hope that the provisions made for your comfort, edification and pleasure will be satisfactory. It is possible that some who now journey hitherward are as truly discoverers of an unknown land as were those first voyagers who, three hundred years ago, hailed with delight the vision of this cape with its broad expanse of bay. To these, the opportunity to view the various points of interest will appeal. By the courtesy of the Reading Railroad, through Mr. Alfred G. McCausland, Superintendent, sufficient trolley cars will be provided to accommodate all who may wish to visit the sections accessible by this means. Cars will be in readiness at 5 o'clock this afternoon for this purpose.

The Ladies' Auxiliary Committee, composed of Dr. Anna M. Hand, Mrs. Lizzie M. Bockius, Mrs. Dr. Paul M. Mecray, Mrs. Dr. James Mecray, Mrs. Dr. Virgil, M. D. Marcy, Jr., Mrs. Dr. Enoch Hollingshead, Mrs. Dr. Harry A. Stout and Mrs. Dr. Edward J. Ill, have arranged for a tea, on Friday afternoon, at the Cape May Golf Club House, to which all the ladies are invited. The tea will be preceded by a boat ride on the harbor, and cars will be at the hotel at 2:30 o'clock to convey the ladies to Schellenger's Landing.

On Friday, immediately after the adjournment of the morning session, the Cold Spring Life Saving Crew, stationed at this point, will give an exhibition of the method of rescue from wrecked vessels. This is done only by permission of the Superintendent of the United States Life Saving Service, and involves the committee in some expense. Notwithstanding the unsatisfactory circumstances that must attend this exhibition, as it will be given on dry land, not on the water, the committee felt justified in authorizing it, because of the interest and value that attaches to this service, and because of the extreme improbability that very many members of this Society ever have had, or ever will have, opportunity to witness this method of rescue of the shipwrecked.

Because there is a certain risk to life, limb and property, if an attempt is made to imitate the actualities of marine disaster, the United States Life Saving Service will only permit this exhibition to be given on the land, and therefore,



much of the realism that we would naturally expect, will be absent.

However, we believe that the stage mechanism, the skill of the actors, and the imagination of the audience, will be sufficient to enable all who witness this drill to more fully realize the perils of the service and the heroism of those engaged in it; and to better comprehend the great debt of gratitude the world owes to the memory of a physician; one who was a Governor of this State, a Member of Congress, and the first Superintendent of the United States Life Saving Service—William A. Newell, M. D.—a graduate of the University of Pennsylvania, and in life an honored member of the Monmouth County Medical Society.

He it was, after witnessing a wreck on Long Beach, Ocean County, in 1839, when all on board perished, conceived the idea that if a rope could have been thrown to the vessel all could have been saved. Pondering upon this subject, he instituted experiments in throwing light lines, by bow and arrow, by rockets, by a shortened blunderbuss; all with comparative success. His idea reached perfection by using a mortar with ball and line. On January 3, 1848, he offered his first resolution, in Congress, bearing upon this subject. On the 9th of August, 1848, his amendment to the Lighthouse Bill, providing surf boats, rockets, cannonades and other necessary apparatus, was unanimously passed. Shortly after the passage of this Bill, on the 12th of January, 1850, the worth of this method of rescue was fully demonstrated, when two hundred and one passengers and crew were rescued from the Scottish barque "Ayreshire" on Square Beach, where she grounded during a blinding snow-storm. By resolution of the Legislature of this State, in 1896, New Jersey officially recognized that Dr. Newell had been solely instrumental in establishing the United States Life Saving Service. Subsequently, he was author of the plan that led to the establishment of the Federal Department of Agriculture.

In providing this exhibition, the committee does homage to the memory of one of the former members of our profession who so nobly served his State, his country, and his fellow men.

On Friday evening, at 7:30 o'clock, the Society and guests will partake of the annual banquet, the arrangement for which will be under the personal supervision of Mr. John P. Doyle, the able manager of the Hotel Cape May. President Ill will discharge the duties of toastmaster on this occasion, and has suggested at least three sentiments that will be responded to by guests.

Following the banquet, the Committee has arranged for a vaudeville performance.

At the conclusion of the performance, those who desire to dance will have opportunity to do so.

It is proper to announce at this time that at some period during the progress of the banquet a flashlight photograph will be taken of the same, by George R. Lawrence & Co., of New York, who will be glad to supply copies to any who desire to subscribe.

The committee wishes to call attention to the very superior orchestra connected with the house, which has been placed at our service by the Manager, and will be heard upon suitable occasions during the progress of the entertainments.

The committee further desires to call the at-

tention of members to the exhibit rooms, where much will be found of interest. The following firms are represented: Charles H. Phillips Chemical Company, D. Appleton & Co., Keasbey & Mattison, Lea & Febiger, Keystone Electric Co., W. B. Saunders Co., Lederle Antitoxin Co., Kress & Owen, Borden's Milk Co., P. Blakiston, Son & Co., Mellin's Food Co., Physicians Supply Co., of Philadelphia, Horlick's Malted Milk, F. A. Davis Co.

In this connection, the committee believes that it is important to remind the members that exhibitors are not actuated by strictly altruistic motives when they incur the expense of renting space, paying freight and hotel charges and car fare to be with us on these annual occasions, and it is a strictly business venture, for which they hope to receive commensurate return; and, also, it is a business transaction upon the part of the Society entered into by the Committee on Arrangements for the income that accrues therefrom. That this is a matter of some importance, can be better appreciated when it is stated that all the expenses incurred by the committee in providing the various entertainments that will be offered you are discharged from the fund obtained from the exhibitors.

The purpose in speaking of this matter, is to ask you to encourage and support our friends in the exhibit rooms, so far as it may be convenient for you, by making purchases at this time, rather than waiting for them to call upon you at home. We are sure the effect of this will be mutually satisfactory.

It is the experience of the Committees on Arrangements that every year it is becoming more difficult to secure exhibitors; and the difficulty will increase, unless greater encouragement is extended to them in the future than has obtained in the past. Into your hands we commit their interests.

Respectfully submitted,

DANIEL STROCK,  
Chairman.

It was moved and seconded that the report be received. Carried.

#### ELECTION OF PERMANENT DELEGATES.

Dr. Wm. J. Chandler announced that there were several nominees, but the only certificate received by him from the Committee on Credentials, was that of Dr. Randolph Marshall, of Tuckahoe. This was in proper form and could be presented.

Dr. Robert M. Curts, of Paterson, made a motion that the election of Permanent Delegates be postponed until the meeting of the House of Delegates in the afternoon.

The motion was seconded and carried.

Dr. Chandler said that he had requested the Secretaries of all County Societies to forward to him the credentials of their nominees for Permanent Delegates, so as to avoid any delay in their election. If this request had been attended to, the election of all the nominees could have taken place at the time indicated in the program.

## REPORT OF THE COMMITTEE ON HONORARY MEMBERSHIP.

Dr. H. Genet Taylor, Chairman, stated that the committee had no candidates to propose for membership.

## REPORT OF THE COMMITTEE ON BUSINESS.

Dr. Chandler said that Dr. J. P. Hecht, Chairman of this Committee, had written to him that the committee had nothing to report to the Society.

Report of the Committee on Program was presented by W. J. Chandler, Chairman, as follows:

## REPORT OF THE COMMITTEE ON PROGRAM.

Acting last year under the direction of the Society, the Program Committee made trial of the plan of publishing the full program in the JOURNAL and of issuing only a limited number of booklet programs. Many members forgot or were ignorant of this change and were disappointed in not receiving the usual form of program. Dissatisfaction was so general and so many requests were made for a return to the old plan that your committee decided to issue the programs as usual. A copy has therefore been mailed to every member of the Medical Society of New Jersey, to the secretaries of all the State Societies, to the honorary members of this Society, and to many corresponding institutions, guests, and others.

While this plan involves much greater expense it is on the whole more satisfactory and we trust that the action of the committee will be approved.

Respectfully submitted,  
ALEXANDER McALISTER,  
F. F. C. DEMAREST,  
WM. J. CHANDLER, Chairman,

It was moved and seconded that the report be received and the action of the committee approved. Carried.

## REPORT OF THE COMMITTEE ON SCIENTIFIC WORK.

Dr. E. J. Marsh, Jr., Chairman of this Committee, not yet having arrived, the report was postponed.

Dr. Edmund L. B. Godfrey, of Camden, made a motion that hereafter the program be sent to the daily papers of New Jersey. There are about fifteen or twenty of these, and he thought that sending them the program would help to make the meeting more widely known.

Dr. Chandler seconded the motion and said that the program had been sent to some of the dailies, but that if Dr. Godfrey would send him the complete list, he would be glad to send the program to all.

The motion was then carried.

Report of the Committee on Publication was read by William J. Chandler, Chairman, as follows:

## REPORT OF THE COMMITTEE ON PUBLICATION.

The work of the Committee on Publication has been mainly routine and differs but little from that of the preceding year. The Constitution and By-Laws of the Society with all amendments to date, together with a revised fee table, have been printed and bound. A copy was mailed to each member with the October issue of the JOURNAL.

The monthly publication has proceeded quite regularly and, owing to the able and faithful work of the editor, the number of pages has been largely increased and its literary value greatly augmented. The previous volume contained 380 pages of reading matter and 120 pages of advertising. The JOURNAL for the year just closed contained 476 pages of reading matter and 128 pages of advertisements. But this last volume covered only eleven months. If, to complete a year, we include the June number, we have a total of 520 pages of reading matter, and 140 of advertising. The total number of pages of the last volume would then be 660, as compared with 510 pages for the previous year—an enlargement of almost thirty per cent.

While we have given the members of the Society a larger and a better journal, we have also lessened the net cost of the publication. Our expenses have been as follows:

Orange Chronicle Company.....	\$1,536.65
Postage on JOURNAL.....	50.36
Editor's Salary and Expenses for one year .....	592.44
Sundries .....	134.74
	<hr/>
	\$2,314.19

Our receipts have been as follows:

From Advertisements .....	\$1,477.32
Sales and Special Subscriptions..	27.34

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\$1,504.66

Net cost of JOURNAL for the past year \$809.53

This net cost compared with \$832.00—the net cost of the JOURNAL for the preceding year—together with the increased size of the JOURNAL, are facts which your committee present with great satisfaction. But the actual condition is even better than appears from the above showing. For while in the expense account we have included the cost of twelve issues of the JOURNAL and the expense of editing for a whole year, the receipts cover a period of only eleven months. If we make allowance for this disparity in the time covered by the expense and receipts accounts it would bring the net cost of JOURNAL for the past year down to somewhat less than \$700.00. This is a smaller amount than we expended for “transactions” twenty years ago, and when our Society had less than one-half its present membership.

We have reason to think that the statement for the coming year will be even more favorable. We shall continue to increase the number of pages and, as far as possible, add to the interest of the reading matter. In this latter effort we are largely dependent on *you*, and we urgently request each one to feel it his individual



duty to furnish at least one paper, a report of a case or some news items during the coming year. We have always sought to impress on your minds that this is *your* JOURNAL, and we trust that you will each take a personal pride in maintaining a high standard of excellence for the JOURNAL which you have established.

CHARLES J. KIPP,  
ELLIS W. HEDGES,  
WM. J. CHANDLER, Chairman,

It was moved and seconded that the report be accepted. Carried.

#### REPORT OF THE JUDICIAL COUNCIL.

Dr. Thomas W. Harvey, of Orange, made a motion that this report be postponed until later in the Session. The motion was seconded and carried.

#### REPORT OF THE CORRESPONDING SECRETARY.

This report was read by Dr. Chandler for Dr. Strock, as follows:

*To the Medical Society of New Jersey:*

The Corresponding Secretary has performed all the duties that have devolved upon the office during the year past. Reports and journals have been received from the various corresponding Societies, and filed in the Archives.

DANIEL STROCK,  
Corresponding Secretary.

It was moved and seconded that the report of the Corresponding Secretary be received. Carried.

Dr. T. R. Chambers, of Jersey City, said that he would like to refer again to the report of the Committee on Publication. He did not think that the Society ought simply to approve it, but believed that it was up to the members of the Society to get busy and do something; as the JOURNAL had been a continued source of delight every month. The minutes of the meetings in former years had cost the Society considerably over one thousand dollars per annum. It was bound in pasteboard, and came three or four months after adjournment; and it was usually promptly placed in the book case, became covered with dust, and was rarely ever again opened. Now the JOURNAL comes every month fresh, and furnishes good material for reading. Dr. Chambers said that the pains used in putting it together and preparing for the members a constant intellectual feast during the year must be costing some one considerable effort, and he considered that the Editor of the JOURNAL, Dr. David C. English, of New Brunswick, was doing a great work for the Society.

Dr. Chambers had not spoken to anyone about the matter, nor had anyone spoken to him about it; but he would make a motion

that the salary received by Dr. English, five hundred dollars, should be increased to one thousand dollars. He said that even this was very little for a man who must have to work so hard in order to get the paper out. He made this motion in commendation of the work that Dr. English had continually been doing for the Society.

Dr. Charles J. Kipp, of Newark, Chairman of the Board of Trustees, said that the Board of Trustees had already considered the matter, and had decided to increase the Editor's salary to six hundred dollars and allow him three hundred for expenses.

Dr. Chambers said that he was voicing the sentiments of a number of members outside of the Board of Trustees, who had felt grateful to Dr. English.

On the request of Dr. English he withdrew his motion.

#### REPORT OF THE COMMITTEE ON PRIZE ESSAY.

It was moved that this be postponed until the afternoon, because the committee was not yet prepared to make its report. Seconded and carried.

The President objected to the postponement of so many reports.

#### REPORT OF DELEGATES TO AND RECEPTION OF DELEGATES FROM OTHER SOCIETIES.

Dr. W. Blair Stewart, of Atlantic City, said that it had been his privilege to be a delegate to the Annual Meeting of the Medical Society of Pennsylvania, held at Reading last fall, which had been a most enjoyable and scientific meeting, with a program full of matters of decided interest to the profession. The symposia read on that occasion were very instructive. The Society had met in sections, owing to its having eight hundred delegates and one thousand physicians in attendance, which made the section plan feasible.

One feature of the meeting that had struck Dr. Stewart was the fact that the secretaries of the individual county medical societies met together in a social session and discussed ways and means of benefiting the County Societies. They sat together around the banquet table, and were addressed by eminent speakers, among whom was Dr. McCormack. The meeting resulted in a great deal of good.

Dr. Stewart thought that this was an excellent plan, and one that might bear investigation by the New Jersey Society. If the secretaries of the county societies could be brought more in touch with one another,

he thought that more could be accomplished for the good of the individual societies, and also that increased interest might be taken in the program. He also thought that such a meeting would be of great assistance to the Publication Committee and the Editor, in causing articles to be sent to the JOURNAL from the various county societies. The Pennsylvania State Medical Society had found this plan feasible and advantageous to all.

Dr. Chandler said that he heartily favored this idea. He thought it would be very desirable for the secretaries to meet and talk over the matters that they have in common with the State Society. New Secretaries are unfamiliar with their duties. Such a meeting would be instructive and an incentive to greater activity on their part during the year.

Report of the Committee on Hygiene and Legislation, L. M. Halsey, Chairman, was called for.

Dr. Halsey said that he would like to have the reading of the report of his committee postponed until later, as there were a number of important matters to be presented to the Society, which should lead to free discussion on the part of the members. He therefore moved that it be deferred until the next afternoon. The motion was seconded.

Dr. Chandler said that so many reports were being deferred that the other meetings of the House of Delegates would be crowded with business, the program for the meeting on Friday afternoon being already sufficiently full. He thought that if Dr. Halsey would consent, it would be well to have his report read later in the present session.

Dr. Joseph M. Rector, of Jersey City, asked why all these reports were being deferred. He had asked the chairmen of the different committees why they wanted to postpone them, and had been told that they wanted to wait until more members arrived. He thought that the program ought to be followed. The present session had been chosen for the reading of reports; and if the members had cared to hear them, they would have been in attendance. He did not see why these reports should be allowed to be deferred and crowd out other business. He therefore made a motion that the reports be omitted altogether, if they were read at this session.

Dr. Halsey said that the reports he had to present were of especial interest to the

delegates of the respective county medical societies, few of whom were present. The committee on Hygiene and Legislation were making some specific recommendations to the House of Delegates of the State Society, which they felt should receive the careful attention of the House of Delegates. This was not because they sought a great amount of applause, but because the recommendations were of such vital importance that they should be discussed with a full representation from the county societies, that they were asking that the matter be deferred.

On vote, Dr. Halsey's motion was carried.

#### REPORT OF THE COMMITTEE ON MEDICAL DEFENSE.

Dr. Schaufler said that this committee had been formed two years ago, to make a report at the last annual meeting. There being some misunderstanding upon this report, which had been read last year, action upon it was deferred until the present session. The committee had no additional report to make. Their previous report, with reports from other state societies on the subject, having been printed in a recent number of the JOURNAL, all the members of the Society should have made themselves familiar with the facts. The committee merely wished to bring up last year's report for discussion, if the House of Delegates so desired.

Dr. Ill expressed the hope that there would be a full discussion of this vital matter.

Dr. D. C. English asked whether the Committee on Medical Defense would not be more definite and tell the Society in detail what they wished to recommend, so that the report could be discussed with more intelligence.

Dr. Schaufler said that the report was printed in full in the Transactions, but that the idea was that the medical societies of several States—New York, Pennsylvania and Illinois, particularly—had in their by-laws a clause providing for the defense of actions brought against members in good and regular standing. If anyone brings a suit against a member for alleged malpractice, he refers the matter to the Secretary of the State Society. If the latter finds that the member is clear on the books of the county and state societies, the case is referred to the State Society's counsel, and an eminent lawyer retained by the Society,



who looks over the matter, takes the evidence in the case from the accused, and either settles the matter with the accuser out of court or in open court. If the accused is in the right and it is so decided, the charge is dropped and he is free. If he is in the wrong, he has to pay whatever verdict is brought against him. This is the whole thing in a nut-shell. The system has been carried out in various States, and has everywhere been eminently satisfactory. The argument against it that it increases the expenses to the State Medical Society has not, said Dr. Schuffler, been found serious in other States. The cost has been paid out of the dues as they already stood, or the dues were slightly increased.

Another argument, that anyone that wishes to have medical defence can, by paying ten dollars, insure himself in various reputable insurance companies, who will take the matter up, and that if the case goes against him, the damages are paid to a certain extent by the company, applies in each State to comparatively few members of the State Society. There are a number of them that carry such insurance and find it of great importance, especially in the case of prominent surgeons; but the expense of ten dollars or more a year is not such as to make it possible for the whole membership of the association to avail themselves of it. The slight expense of fifty cents or a dollar a year added to the dues would come within the range of a much larger number of persons.

Dr. Kipp said that before the matter was discussed further, he thought it would be well for the Society to know about the Treasurer's Report, which could be read at once, after hearing which the Society could discuss the matter of medical defense more intelligently. He therefore made a motion that the Treasurer's Report be read immediately.

The motion was seconded and carried.

#### REPORT OF THE TREASURER.

This was read by Dr. Archibald Mercer, of Newark, the Treasurer, and was as follows:

#### TREASURER'S REPORT.

Dr. Archibald Mercer, Treasurer, in Account with the Medical Society of New Jersey.  
June, 1907—

#### DR.

Atlantic County assessment for 1907 .....	\$114.00
Hudson County, additional payment for 1907.....	2.00
Hunterdon County, on account assessment for 1907.....	28.00

Essex County, additional payment for 1907 .....	8.00
July, 1907—	
Interest, Bond, No. Pacific & Gt. North'n (B. 2 Ed.)....	10.00
Interest, Bond, Chicago & Alton .....	17.50
Monmouth County, additional payment for 1907.....	6.00
Essex County, additional payment for 1907 .....	2.00
Burlington County, additional payment for 1907 .....	4.00
August, 1907—	
Interest, Bond, N. Y. Cent., Mich. Cen. Coll. ....	17.50
September, 1907—	
Hunterdon County, additional payment for 1907 .....	7.00
Mercer County, additional payment for 1907.....	2.00
Committee of Arrangements, 1907 .....	15.00
October, 1907—	
Interest, Bond, No. Pac. & Gt. North'n, C. B. Q. Coll.....	10.00
November, 1907—	
Hunterdon County, additional payment for 1907.....	5.00
Hudson County, additional payment for 1907 .....	4.00
Essex County, additional payment for 1907 .....	2.00
December, 1907—	
Middlesex County, additional payment for 1907.....	2.00
January, 1908—	
Interest, Bond, No. Pac. & Gt. North'n, C. B. Q. Coll.....	10.00
Interest, Bond, Chicago & Alton .....	17.50
Camden County, additional payment for 1907.....	1.00
Atlantic County, additional payment for 1907.....	6.00
Essex County, additional payment for 1907 .....	10.00
February, 1907—	
Interest, Bond, N. Y. Cent., Mich. Cent. Coll.....	17.50
Atlantic County, additional payment for 1907.....	10.00
Essex County, additional payment for 1907.....	4.00
March, 1907—	
Camden County, additional payment for 1907.....	4.00
Essex County, additional payment for 1907.....	2.00
Mercer County, additional payment for 1907.....	2.00
April, 1907—	
Interest, Bond, No. Pac., Gt. North'n, C. B. Q. Coll.....	10.00
May, 1908—	
Atlantic County assessment..	118.00
Bergen County assessment....	80.00
Burlington County assessment	79.00
Camden County assessment..	176.00
Cape May County assessment.	40.00
Cumberland County assessment	64.00
Essex County assessment.....	588.00
Gloucester County assessment.	50.00
Hudson County assessment...	376.00

Hunterdon County assessment.	40.00
Mercer County assessment...	146.00
Middlesex County assessment	84.00
Monmouth County assessment	78.00
Morris County assessment...	106.00
Ocean County assessment...	40.00
Passaic County assessment...	188.00
Salem County assessment...	44.00
Somerset County assessment...	48.00
Sussex County assessment...	34.00
Union County assessment...	160.00
Warren County assessment...	46.00
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Publication Committee of Journal .....	\$2,935.00
Cash Balance in Bank, June 17, 1907 .....	1,423.69
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	3,994.67
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	\$8,353.36
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\$1,000 Bond, No. Pac. & Grt. North'n, C. B. & Q. Coll., 4 per cent., cost.....	\$972.50
\$1,000 Bond, Chic. & Alton, 3½ per cent., cost.....	786.25
\$1,000 Bond, N. Y. Cent., Mich. Cent. Coll. 3½ per cent., cost	\$912.50
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	2,671.25
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	\$11,024.61

## CR.

June, 1907—	
Dr. T. W. Harvey, Councillor	\$8.00
Dr. O. Strock, Corresponding Secretary .....	12.50
Dr. E. W. Hedges, Corresponding Secretary for 1906.....	12.00
Dr. W. A. Clark, Councilor...	2.86
Dr. J. L. Leal, Councilor...	8.00
Dr. Philip Marvel, Councilor...	62.82
Dr. W. J. Chandler, Com. Program .....	34.75
Dr. W. J. Chandler, Rec. Secretary .....	136.30
Dr. W. J. Chandler, Com. Publication .....	284.35
July, 1907—	
Dr. A. Mercer, Treasurer...	10.17
Whitehead & Hoag, Badges...	35.38
Dr. N. L. Wilson, Scientific Committee .....	4.00
Fidelity & Casualty Co., Treasurer's Bond .....	15.00
Dr. W. J. Chandler, Com. Publication .....	255.13
September, 1907—	
Lulu Gay, stenographer.....	65.00
Dr. W. J. Chandler, Com. Publication .....	227.45
Dr. W. J. Chandler, Com. Publication .....	138.54
Dr. W. J. Chandler, Rec. Secretary .....	157.83
Dr. W. J. Chandler, Com. Publication .....	283.68
November, 1907—	
Dr. W. J. Chandler, Com. Publication .....	103.54
December, 1907—	
Dr. W. J. Chandler, Rec. Secretary .....	75.40
Dr. W. J. Chandler, Com. Publication .....	107.82

January, 1908—	
Dr. W. J. Chandler, Com. Publication .....	159.90
Dr. W. J. Chandler, Com. Publication .....	182.45
February, 1908—	
Dr. W. J. Chandler, Com. Publication .....	116.88
Dr. W. H. Iszard, Councillor.	15.35
March, 1908—	
Dr. W. J. Chandler, Com. Publication .....	121.30
April, 1908—	
Dr. W. J. Chandler, Com. Publication .....	146.82
Dr. W. J. Chandler, Secretary	108.45
Dr. W. J. Chandler, Com. Publication .....	111.25
May, 1908—	
Dr. W. J. Chandler, Com. Publication .....	105.69
June, 1908—	
Cash Balance in Bank, June 2, 1908 .....	5,244.75
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	\$8,353.36
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\$1,000 Bond, No. Pac. & Grt. North'n, C. L. & Q. Coll., 4 per cent., cost.....	\$972.50
\$1,000 Bond, Chi. & Alton, 3½ per cent., cost.....	786.25
\$1,000 Bond, N. Y. Cent., Mich. Cent. Coll., 3½ per cent., cost	912.50
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	\$2,671.25
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	\$11,024.61

It was moved and seconded that the report be received.

Dr. Chambers asked why the Treasurer had kept on hand so much as five thousand dollars in cash, and had not invested it in bonds.

Dr. Rector asked what was the net gain or net loss for the year.

Dr. Mercer said that there was a cash balance of \$5,244.75.

Dr. Rector wanted to know whether the Society had lost or gained any money during the year, taking all receipts and expenditures into account; whether they were gaining or running behind. There was a question to come up later that would involve this information.

Dr. Mercer said that at the beginning of the year there was a balance of \$3,994.67, so that the Society had about twelve hundred and fifty dollars more in this year's balance in bank.

Dr. Ill said that the Treasurer had stated that the Society was receiving somewhat more money than it was spending.

Dr. Chambers said he would like to ask the Treasurer, through the President, why there was so much money on hand in cash. He thought that two thousand dollars in cash should have been kept, and that the



other three thousand should have been invested in bonds.

Dr. Mercer said that the reason it had not been invested was that the Treasurer had not been authorized to invest it.

Dr. Chambers said that he was asking for information in order that the Society should order the Treasurer to buy bonds.

Dr. D. C. English called attention to the fact that the largest part of this money had just come in.

Dr. Chambers said that there had been three thousand in cash last year.

Dr. English said that this had been used for expenses.

Dr. Ill said that almost all of the five thousand dollars had come in during the past two weeks.

Dr. Gray asked whether the matter of the investment of money was not a question for decision by the Trustees.

The motion that the report of the Treasurer be received, which had been seconded, was carried.

Dr. Marcy made a motion that the Committee on Medical Defense as presented at the last annual meeting be accepted and approved, and its recommendations concurred in.

Dr. Kipp said that the reason that he had made the motion that the Treasurer's Report be read, before the Report of the Committee on Medical Defense was further discussed, was that the Society could see that the plan of the Committee on Medical Defense could be adopted without necessitating additional assessment of the members. The surplus money might just as well be expended for that purpose as for any other. In other States it had been necessary to increase the dues five dollars for the first year, but this would not be necessary in the New Jersey Society.

Dr. David E. English, of Milburn, asked whether the adoption of the plan read last year would interfere in any way with the action of the insurance societies to which some of the members belong, and whether it would interfere with a doctor's employing associate counsel to act with the counsel of the Society.

Dr. Schauffler replied that, so far as he understood, from the action of other societies, it would not interfere with any individual rights that the member had not voluntarily given up. If he appealed to the State Medical Society for defense, he would give up the right to compromise the matter himself; and he naturally would not employ outside legal help; but if he should

prefer to have extra help, he would not refer the matter to the State Society.

Dr. D. C. English said that Dr. D. E. English had asked whether the member could have outside help in addition to the counsel of the Society, and remarked that he imagined that this would be a matter between the accused member and the counsel for the State Society.

Dr. F. D. Gray, of Jersey City, said that he felt like saying a few words on this subject, particularly as the county that he represented, Hudson, had taken a decided attitude in regard to the matter and voted against the proposition. From that standpoint, and from a personal one as well, he felt that the Society would be better off without this arrangement than with it. He said that the arguments in favor of it had been heard and he would give some against it.

In the first place, he said, the question that had just been asked and answered as to complicating the matter between the State Society Medical Defense and an insurance defense is important. A large number of physicians and surgeons in New Jersey are already insured in substantial insurance companies against malpractice suits, and undoubtedly prefer to continue this insurance; and if it were going to be a question between turning over their interests to the State Society or the insurance company, they would cling to the source of assistance that they had had. The important matter is that there is no backing behind this medical defense as regards damages. Of course it might be possible to settle cases out of court, but the same thing would hold true with insurance companies. The greatest damage to a doctor is, of course, the fact that a suit has been brought; but this holds true in either case. It is not an unessential matter that if a man is mulcted one thousand or five thousand dollars, this amount does not have to come out of his own pocket. The plan of the committee does not provide for the payment of a single cent of damages. Though the report of the Treasurer was very encouraging there are many ways to spend the balance outside of medical defense, which the members of the Hudson County Society do not believe in.

Dr. Rector said that, as a representative of the same County, he thought that the Committee on Medical Defense and those who had devised this legislation had forgotten that it is special legislation. It did not appear to him that the Society had a

right to spend the money in the way proposed. Such money ought not to be taken out of the treasury of the Society without the unanimous vote of the members; and the plan would continue to be special legislation, unless the entire Society as a unit wished to spend the money in this way. If an individual member should get into a complication and appeal to the counsel of the Society, there might be many questions that this counsel, able though he might be, would not be fitted to cope with. There are a great many wheels to be turned in order to make inquiries and obtain any information that would enable the counsel to be of use to the individual member; and there is no way by which the gentlemen who might represent the Society in one part of the State could obtain information from another part of it. The money would be thrown away. The members have a right to insure themselves without asking the Society for permission to do so. If such a resolution were passed and a member did not accept the Society's counsel, he would gain the ill will of the Society; and there would be dissatisfaction with the Society, if the individual members did not think that they were properly taken care of by its counsel. The question should be well looked into before exchanging the protection of an insurance company for defense by the counsel of the Society. Dr. Rector thought that the little money the Society had ought not to be spent in such a foolish way.

Dr. T. R. Paganelli, of Hoboken, said that he would take the same stand as the other delegates of Hudson County. He thought that the money could be turned to greater and better uses than that of medical defense. Some more of it might be spent for prosecuting charlatans and others that had no right to practise, instead of for the plan advocated by the committee.

Dr. Britton D. Evans, of Morris Plains, said that much of what he had intended to say had already been said. The statement that an accused member would be morally bound to stand by the counsel employed by the State Society seemed to him a matter of intense interest. If a suit were brought against a man and he were not permitted to have his choice of legal advice or to call anyone in as an advisory or assistant counsel, without incurring the displeasure of the regular counsel, and if his doing so meant the dismissal or withdrawal of the regular counsel employed by the Association, Dr. Evans thought that it would reflect upon the person declining to accept such service.

His reasons might be satisfactory to himself and to his immediate friends, but the Society and the public at large would not understand them and would censure him in spite of them.

Another objection was that the Society would be obliged to have a committee, the duties of which should be to make definite and specific inquiry into the merits of each particular case. This committee would have to be composed of men of exceptionally good judgment—men who would not be bound by little professional differences; and it would be a very difficult matter to get a committee of five physicians (Dr. Evans explained that he made this statement with all due deference to the profession with which he was associated, and that he loved) who would agree upon a matter of that sort. Some members of the committee would probably take issue with the others on the minor points, if not the cardinal points involved.

Dr. Evans said that he did not understand that such a committee had been selected. If next month a case of the kind were to occur, and the following month two cases, Dr. Evans asked how would the accused men obtain immediate action, and who would under this resolution be clothed with power to give them immediate relief, so that they might be assured of substantial support.

Dr. Schauffler said that no such action on the part of a committee would be necessary. If the member were in good standing in the County and State Societies and had paid his dues, he would be entitled to the help of the State Society. This point would be decided solely by the Treasurer's books.

Dr. Evans said that the simple matter of holding membership in the New Jersey Medical Society is not a substantial, gratifying and satisfactory reason why the entire Society should stand by an accused physician. In all state societies men who do not conduct themselves professionally in a manner that meets even approximately the unanimous approbation of the members of the Society, when it meets to take action on their conduct, are included. If the Society is bound, simply because a man has been a member of it, and has paid his dues, to support him and stand by him when he is charged with malpractice, Dr. Evans thought that it was taking upon itself obligations and complications that had not been clearly presented.

Dr. D. C. English said that he had not



risen to discuss the matter, but merely to state a few facts, which he asked the members to consider. Every society that had adopted the plan had been utterly opposed to it at first. The State Societies that had gone into it, however, had been so impressed with the value of it that they had become enthusiastic in its favor.

Another fact was that it was not the question so much of spending a large amount of the Society's funds in standing by a member who might have been accused, because wherever the plan had been adopted it had almost stopped prosecution—and especially persecution. This had been the experience in the States in which it has been tried, that the members of the societies that have adopted it are not being accused. Men are afraid to accuse them, when they find that the State Society is standing behind them. It has shut out an immense amount of prosecution against the physicians of these States. These facts, said Dr. English, had come to him very clearly in the last few months.

Another fact that he wished to call attention to was that in the State of West Virginia, the President of the State Society, Dr. Golden, was accused of malpractice before the Society adopted the plan. After its adoption, a most bitter fight took place, with the result that the President was entirely exonerated. The prosecution had been a spite affair, and had led the West Virginia State Society to adopt the plan.

Dr. Chandler said that he wished to correct a little misapprehension that seemed to have been aroused by Dr. Schauffler's reply regarding the conditions upon which a case is undertaken. The mere fact that a man is in good standing does not entitle him to defense, but merely to present his case to the counsel. If the latter finds that he has not a case, that he had done wrong and is guilty, the counsel will not defend the doctor. If he has not done wrong and has made a full statement to the counsel, the latter goes ahead and takes full charge of the defense. Dr. Chandler thought that this statement of the facts would meet the argument that Dr. Evans had presented.

Dr. Gray's opinion that the profession receives fuller protection with the regular insurance companies is undoubtedly true, because the accused doctor is not only defended, but the damages, up to a certain extent, if he loses the suit, are paid by the company. The expense of such insurance is large and not one tenth of our members would protect themselves. Then the Med-

ical Society of New Jersey could not take up such a plan of insurance. The advantage of the plan proposed by the committee is that every man in the Society, if he pays his regular dues and has any kind of case can, without additional expense, when a suit is brought against him, be defended, if he has performed his duties as a medical man properly. In nine cases out of ten, he will be acquitted, in which case all his expenses are borne by the Society. The money damages are not all. The fact that he has been sued, also, is not all. The fact that he sometimes, even though acquitted, has to expend for his defense several thousand dollars is a great hardship. To Dr. Chandler's knowledge, physicians had paid in defending suits, as high as twelve to fifteen hundred dollars, and then were acquitted. No suit would have been brought in these cases at all, if it had been known that the suit would be defended to the end and not compromised.

This plan does not, said Dr. Chandler, constitute special legislation, and he knew of no rule in the Medical Society of New Jersey requiring it to vote as a unit in the expenditure of money; if the money is to be used for something other than the ordinary purposes of the society; the appropriation must be ordered by a two-thirds vote of the House of Delegates, and be approved by the Board of Trustees.

The great advantage of the plan, said Dr. Chandler, is that it would build up every County Society in the State. In addition to receiving the JOURNAL, being in good standing in the State Society, and being eligible for membership in the American Medical Association, the members of the County Societies would have the assurance that if anyone should bring a suit against them, they would be defended properly, and no compromise made. The very knowledge of this fact would prevent the institution of such suits.

Dr. Chambers said that a recent writer had stated three cardinal principles for professional living: Love your work, serve your patients, and treat your professional brethren generously. He thought that the adoption of the medical defense plan would be a way of carrying the latter principle into effect.

Organization, he said, is what has given the profession the power to command respect from those outside who would assail them. When each member of the profession is acting as a free-lance, there is no way of uniting to repel an attack from a

common enemy. This plan affords an opportunity to show the result of organization. By getting together, nothing would be jeopardized; for it would be left in the hands of the counsel to protect the members, if innocent. If guilty, he would not take hold of the case at all.

Dr. F. D. Gray asked permission to speak again. This was granted, and he said that in Dr. English's statement of facts to show that this method of defense had almost entirely done away with litigation along these lines it would be interesting to know how many cases had been settled by compromise out of court. He thought that there might be a large number of such cases included in the array of non-litigated cases, and that this might alter the complexion of affairs.

As to the possible injustice to the alleged rich element of the Society, who are able to pay ten dollars for insurance,—and he believed that all the members, if they wanted protection, would be able to afford this amount. Dr. Gray said that if he, as the holder of a policy guaranteeing him five or ten thousand dollars, should a suit for malpractice be brought and decided against him, should elect not to give his case into the hands of the Medical Defense of the State Society, the complainants would immediately say that there must be good reason why he was not being defended by his State Society. It would be for him to disprove a lot of insinuation that might arise from that source.

Dr. Rector said, in reply to Dr. Chandler, that if he were being prosecuted and should lay his defense before the counsel of the Society, and if the latter should decide that he was guilty, he would have no chance to defend himself before the courts. No jury would find him innocent, when his Society had said that he was guilty. It is only the courts of law and the jury of the State that can decide upon a question of guilt or innocence; and the fact that the counsel believes one way or the other counts for nothing, except that should he say a member is guilty, this opinion would count against the accused in the court. This point, Dr. Rector thought, should be considered before the judicial rights of a man are taken away.

Dr. Henry Chavanne, of Salem, said that he had not been present at the last meeting, and had not heard the committee's report; but that he had picked up considerable by listening to the discussion. He asked whether he had understood correctly that

there was a fund of two thousand dollars for the purpose of medical defense, and asked whether the Society had the right to go into other funds and exhaust its money, in case of a prolonged contention, carried from one court to another. He also wished to know whether the counsel employed to inquire into the guilt or innocence of the defendant would be able to distinguish between suspicion and false testimony and a compromising position into which a member of the profession might get. Many physicians had seen sick persons when no one else was present, and had had the trouble of clearing themselves from a slander. In the newspaper recently it was stated that an innocent dentist who had administered an anesthetic had been obliged to pay damages, because the jury had been emotionally affected by the tale of the plaintiff. He thought that there was a possibility of there being an epidemic of malpractice suits in one year, and desired to know whether the Society had sufficient means to protect every individual. New Jersey might not have the means, even though Illinois, Massachusetts, Pennsylvania, and other States might be able to do it. These State Societies might have settled their suits out of court, but New Jersey's might not be able to do the same. If there were wealthy members willing to subscribe, it would be all right; but according to Dr. Chavanne's view, the Society was not yet on the proper ground to adopt the measure.

Dr. Chandler said that the Society does not pay the damages, but merely the cost of defense; and that there were no large charges to come out of the Society's funds.

Dr. Fred M. Corwin, of Bayonne, remarked that considerable had been said about being innocent and guilty. A guilty man is not always convicted, and an innocent man does not always escape having a verdict rendered against him. If an action is brought against a man, he is to present the case to the counsel, and lawyers will take one side as quickly as another. If the lawyer thinks the case is good, but does not make a successful defense, the doctor is under a great disadvantage thereafter. Dr. Corwin said that while he always intended to do right and did not intend to merit conviction, he wished to be insured in a company that will stick to him to the last ditch and pay the damages.

Dr. Marcy asked whether there was any reason to suppose that the medical men of New Jersey are different from the profes-



sion in other States which have tried the plan. New York had had it in operation for a number of years, and Dr. Vander Veer last year had made the statement that it had been eminently satisfactory there. Dr. Marcy could not see how it would prevent a man from carrying insurance in any other corporation. It seemed to him that this was an opportunity, as Dr. Chambers had said, of showing the union of the medical profession and that the members are organized for the medical protection of one another; and that it would bring other men into the Society, which contains only three-fourths of the eligible men in the State. If such an incentive were offered, it would go a great way toward bringing in the other one-fourth; and Dr. Marcy was heartily in favor of the adoption of the plan.

Dr. Rush Neer, of Paterson, said that he had had no experience in speaking before audiences, but that he had a couple of points in his mind that he wished to bring out. He did not believe in mixed business, and that insurance should be left to insurance companies. If he needed a lawyer, he should prefer to select one himself, just as people wish to do about their doctors. This kind of insurance would not pay the damages; so he would prefer to be insured with a company that would do so. He thought that the Society should give its moral support by resolution and action of the Council; but any other, such as financial support, he did not think proper.

Dr. Robert M. Curts, of Paterson, made a motion that the question be postponed until Friday morning, so that Dr. Ill's address might be heard before a decision was reached.

Dr. Marcy made a motion that it be laid on the table, as an amendment to the motion that it be postponed until Friday.

Dr. Ill said he would prefer the discussion to go on until a decision was reached upon this very important matter, as it would not conflict with his paper, in which he had merely a suggestion to make bearing upon the subject.

Dr. Bruno Hood, of Newton, wished to call attention to the fact that if a man is guilty, he may be guilty in varying degrees and that even if guilty, he should not be abandoned to his enemies. The counsel is supposed to be the authority to determine whether a man is guilty, and he may be able to do so to a certain extent; but a doctor cannot do everything, and a country doctor may not be able to do as good work as some practitioners in the city with plenty

of assistants. If the doctor brings the case to the counsel, who looks it over and says: "Yes; you are somewhat guilty," has he then the right to abandon the case? Dr. Hood thought this a very wrong course, because even a guilty man is entitled to some defense.

Dr. Neer said that this brought up a point in his mind. He thought it pretty tough that people who perhaps would not have paid their bills anyway should have the right to prosecute a man who has been faithful and worked hard, even though a little incompetent.

Dr. Curts offered an amendment that the resolution regarding medical defense be laid on the table until the next annual meeting of the Society. He was not doing this, he said, in a jocular way. He wanted it to be considered seriously. It seemed to him that there had been more oratory developed than he had thought existed among the members of the Society. He hoped that the discussion on medical defense would not resolve itself into a competitive debating society. He thought that Hudson County had done very well. A great many salient points had been brought forth, which could be digested before the next annual meeting.

Dr. Marcy had said that a measure that gives protection to the members of the State Society should be adopted. While this, to Dr. Curts's mind, was important, it seemed to him that it was rather a fallacy; because it would not give protection. If a suit should be decided against a member, he would have to pay. Dr. Curts said that the matter had not been sufficiently discussed, and he offered an amendment that it be laid on the table until the next annual meeting.

Dr. Chavanne seconded the amendment. He hoped that, if it were adopted, none of the gentlemen would go out and make the proposition to get members on the basis proposed by Dr. Marcy. He thought that if the Society could not get members without giving them evidence that it would protect them in malpractice suits, it was better off without such a class of members. There is, he said, a large class of men in the State that would enjoy coming into the Society for the protection they would get; because their qualifications have been noted, and the Society is engaged in fighting quacks and other irregular practitioners. Giving an individual who has spent only a short term in a medical college and assur-

ing him that he would get protection would be a very bad thing.

Dr. Marcy said he would like to make a remark later on.

After some further discussion, it was decided by a rising vote to lay the matter over for one year.

Dr. Halsey said that, as Chairman of the Committee on Hygiene and Legislation, he wished to state that the committee had decided that all the Secretaries and reporters of the County Societies should have a legislative conference on Friday afternoon at 2 o'clock.

The Report of the Trustees was read by Dr. D. C. English, the Secretary of the Board. It was as follows:

The Board of Trustees report that there has been no special business during the year until this month requiring special attention, except that requiring a change of date of the annual meeting. In March the attention of the Board was called, by Dr. Strock, chairman of the Committee of Arrangements, to the impossibility of holding the annual meeting in Hotel Cape May the last week in June, as fixed upon by the Society at the meeting of 1907, for reasons set forth in his letter (March Journal, page 401). By unanimous vote it was decided to change the day to the third week in June, 18th-20th. At the recent meeting of the Board, Dr. Charles J. Kipp was re-elected chairman. The annual report of the Treasurer was read in detail. The report showed:

Balance on hand, June, 1907.....	\$3,994.67
Receipts during the year .....	4,358.69
	<hr/>
	\$8,353.36
Disbursements during the year.....	3,108.61
	<hr/>
Cash balance on hand.....	\$5,244.75
	<hr/>
Estimated value of bonds belonging to the Society .....	2,671.25

Total assets of the Society, 1908.. \$7,916.00  
Drs. Alex. Marcy, Jr., and E. L. B. Godfrey were appointed a committee to audit the Treasurer's accounts. They subsequently reported that they had examined his books and vouchers and found them correct.

Dr. W. J. Chandler, chairman of the Publication Committee, presented the committee's annual report showing a year of unusual success of the JOURNAL, with largely increased number of pages and yet at a decreased cost to the Society. The thanks of the Board were given to the Publication Committee and the editor for their careful and excellent work, and the editor was re-elected and his salary was increased one hundred dollars for the coming year and the same amount allowed him for expenses—\$300 per year.

Dr. L. M. Halsey presented his report as chairman of the Committee on Hygiene and Legislation, setting forth the good work done by the committee and those who had co-operated with them, especially in the hearings before the legislative committees on the osteopathic and anti-vivisection and board of health bills, which were

before the Legislature, and in consultations with the Governor; commending very highly the valuable services rendered by Senators Frelinghuysen and Avis and Assemblymen Lowrey and Ramsay. The recommendation in the report received careful consideration and were in the main approved as they will be presented to the Society and the trustees recommend their adoption by the Society. The Board expressed decided objection to the bill which passed the Legislature reorganizing the State Board of Health, and especially the failure to appoint medical men on the new board.

Dr. C. J. Kipp, chairman of the Prize Essay Committee reported that five essays had been presented and that they were all of such general excellence that the committee had had much difficulty in reaching conclusions as to the awards, but after giving an unusual amount of time and thought, they had finally awarded the first prize—\$100 to Dr. Thomas N. Gray, of East Orange, and the second prize, \$50 to Dr. Floy McEwen, of Newark. The report was approved, the sums specified as prizes were authorized by the Board for this object and it was recommended that the Society endorse these awards.

The Board re-appointed the following members to constitute the Committee on Finance: Drs. David C. English, chairman; Henry Mitchell, William Elmer and Wm. J. Chandler.

The Board extended an expression of deepest sympathy to Drs. William Elmer, of Trenton, and Elias J. Marsh, of Paterson, in their prolonged and severe illnesses.

Respectfully submitted,

CHAS. J. KIPP,  
Chairman.

June 18, 1908.

It was moved and seconded that the report be received and its recommendations adopted, and that it be approved as read. Carried.

The Report of the Recording Secretary was read by Dr. Chandler. It was as follows:

#### REPORT OF THE RECORDING SECRETARY.

In reviewing the new membership lists we find as usual, numerous variations. Some county societies have gained, some have lost in membership, while others are stationary. Only two are in this latter class; eight counties show a total loss of twenty-one, and eleven show a total gain of ninety-one, thus making a net gain of seventy. Three counties lost one member each; four counties lost from two to three members each, and one county lost eight members. Eight counties gained from one to six members each; one county gained eleven, one fifteen, and one thirty-eight.

We have not mentioned these counties by name, but it seems especially fitting that a county which has done so much missionary work as to gain thirty-eight members—an increase in its membership of twenty-five per cent.—should be individually named, and we take pleasure in stating that this honorable mention belongs to the component society of the County of Hudson. It is almost unnecessary to add that Hudson County Society has a *live secretary*, and it is largely to his faithful and well directed efforts that this great gain has been made. All counties are not so large nor growing so fast as is Hudson—in



some of our counties the number of practitioners varies but little from year to year—yet, with an active secretary to hunt up delinquents, invite new comers and to put forth vigorous efforts to make the stated meetings interesting, a very perceptible addition could be made to the membership of almost every county society in this State.

We began last year with the names of 115 permanent delegates on our list. Three have died—Drs. David Stephens, of New Brunswick; Charles H. Bailey, of Bloomfield, and Aaron K. Baldwin, of Newark.

The following Permanent Delegates have been absent from two consecutive annual meetings: Isaac S. Cramer, Flemington; George N. Best, Rosemont; George H. Franklin, Hightstown, and Charles L. Lindley, Lakewood.

The excuse of Isaac S. Cramer has been accepted and his name is retained.

Drs. Best, Franklin and Lindley presented no excuses and their names are dropped from the roll.

All county societies having vacancies in their permanent delegation, and having a membership warranting the expectation that they would be entitled to fill such vacancies, were notified of this condition early in the winter. Eight county societies have availed themselves of this right and have selected nominees as follows:

Camden County—John F. Leavitt, Camden.

Cape May County—Randolph Marshall, Tuckahoe.

Passaic County—Fred F. C. Demarest, Passaic, and Edward F. Denner, Paterson.

Union County—Edgar B. Grier, Elizabeth.

Warren County—James M. Reese, Phillipsburg.

Next year being the appointed time for the election of permanent delegates, every component society, whose quota is not already filled will be entitled to select nominees. The number of nominees from each society will depend on the number of members whose dues are paid and properly reported to this Society "at least one month before" our next annual meeting. This suggests an important point not apprehended by many members and overlooked by some of the county secretaries, viz., that the basis of representation depends not on the list of members as printed annually in the supplements of the JOURNAL, but on the certified list of full paid members forwarded by the secretary of the county society to the recording secretary of the Medical Society of New Jersey at least one month before our annual meeting. The basis of representation for each county society for this year was determined by the list sent in by its secretary on or before May 18, 1908. Members who pay their dues after May 18 establish their good standing in both states and county societies, are entitled to receive our JOURNAL, are eligible to membership in the A. M. A., and their names appear in the printed list; but their county society cannot use their names during this current year as a basis of representation and thus increase its number of permanent, or annual delegates. This emphasizes the importance of prompt payment of annual dues and of correspondingly prompt and accurate returns by the county secretaries. If a county secretary should fail to send in the required list at the appointed time he would debar all delegates elected by his society during that year from participation in

any of the proceedings of the House of Delegates, since his society would not have established its basis of representation.

It is desirable that all members should fill out the information blanks, which have been sent to them through their county secretaries. The data, name, age, birthplace, residence, college and date of graduation, date of state license, etc., are thus placed on file with the county secretary and are forwarded by him to the office of the recording secretary of the Medical Society of New Jersey. Many of the secretaries have attended to this matter very thoroughly and have kept their records completely up to date by having all new members fill out these blanks before admission. Cards are also furnished to the county secretary on which to record the election of new members, suspensions, reinstatements, deaths, removals, etc. It is intended that these cards should be returned monthly to the recording secretary and the data thus supplied is sent at once to the A. M. A. When these cards are not returned the new members are unknown to the state secretary and their applications for membership in the A. M. A. cannot be verified without considerable correspondence and delay. Cards and information blanks can be obtained at any time on application to the recording secretary.

There are various subjects of great importance and of widespread interest to come before you at this meeting. Among them are the Medical Defense Report, which was laid over from the last meeting; the Child Labor question and several other matters of medico legal import. It is very desirable that this Society should express itself in no uncertain manner on these subjects. The medical profession is perfecting its organization and will ere long become an all important factor in deciding the character of medical legislation. Differences of opinion and internal dissensions have too long impaired our influence and invited disregard for our suggestions. "O tempora! O mores!" But times and customs are changing. In some states, notably Kentucky, medical and sanitary matters are referred to or largely determined by the State Medical Society and legislators act in accordance with the advice of these medical men. This is as it should be. But, in order that our judgment may be respected, we must free ourselves from all discord and petty jealousies so that we may act as a unit; we must keep in our legislative committee men of experience, ability, and integrity, to present our wishes and press our claims; we must be willing to spend and be spent, giving freely of time, thought and money to the mature consideration of all measures which we recommend or condemn. Thus shall we aid in the attainment of the great objects for which we are striving—the advancement of medical science, the elevation of professional character, the education of the public in medical and sanitary matters and the amelioration of the ills of our fellow men.

WM. J. CHANDLER,  
Recording Secretary.

It was moved and seconded that this report be received. Carried.

The Report of the Committee on Scientific Work was read by Dr. Marsh. It was as follows:

*To the Medical Society of New Jersey:*

The Committee on Scientific Work has the honor to report as follows:

The result of that part of our work which consists in securing speakers for the present meeting is already before you, embodied in the program of the meeting. Of this it is unnecessary to speak further than to thank those who have kindly consented, by taking part, to give interest to the meeting.

Reports were received from thirteen of the twenty-one county reporters in time to entitle them to seats in the House of Delegates. These reports all show a considerable, though varying, degree of professional activity in the various counties represented.

The health of the community, as described in these reports, seems generally to have been good, few epidemics seeming at all widely spread save a very general prevalence of measles. Other outbreaks seem to have been pretty well limited to single localities.

Individually considered, the reports of the various counties follow in summary.

Atlantic reports three business meetings during the year, beside scientific meetings monthly. Next year she purposes to hold two meetings monthly, one for her own members, and one for visitors invited from out of town. This scheme seems to have much in its favor.

Bergen reports four regular and several extra meetings, at which a high standard of scientific and professional interest was set and maintained. With an active and increasing membership, Bergen's prospects for next year are considered bright.

From Burlington also comes an interesting report of meetings, at which much excellent work was done. We are told that the January meeting was "devoted to the annual election and to our wives and lady friends, who met with us in social session." This idea also has much to recommend it. Other forms of professional activity are also reported, as well as epidemics of typhoid in Burlington and Mt. Holly, and a general tendency of measles to be followed by broncho-pneumonia.

Very full and excellent reports from Camden have appeared from time to time in the JOURNAL. Among other evidences of activity probably the most striking is a journal of their own, established and maintained by them. They also report considerable work of interest in the way of papers and discussions, many of which have already been published. Reports of the Camden Dispensary and the Cooper Hospital show increasing good work by each.

Among many interesting papers heard by Cumberland, were one on opsonins and one on the treatment of eclampsia, which were of more than usual value.

This Society has appointed a committee to promote better feeling between the medical profession and the public, and a better understanding of their mutual interests. We don't know what the present feeling is in Cumberland, but the object is laudable, and if the committee succeed in their undertaking, they will deserve more gratitude than people usually get.

From Gloucester also comes a report of a social session, besides papers on the diagnostic value of leucocytosis, and cattle and milk inspection, and also considerable legislative activity.

Hudson held, besides four regular meetings, two in connection with the Retail Druggists Association. A large number of the papers read before this society have been published in the JOURNAL. Thirty-eight new members is the remarkable record for this society.

Hudson has been especially active in legislation and politics.

Hunterdon, in addition to the usual report of meetings, tells of a very widespread outbreak of measles and German measles, one incident of which was the infection of a man of 23, both of his parents, and his grandmother, aged 76, her case being the lightest.

Seven meetings were held by the Mercer County Society, the papers including several on the social and business, as well as the scientific aspects of professional life. This is an example which may well recommend itself to others. The Society has decided to take up the A. M. A. course of weekly meetings. They held a banquet in November, and have taken steps to enforce their regulation regarding contract practice.

Ocean reports a very encouraging growth, by far the largest in its history, and has formed a Medical Milk Commission, in addition to the usual forms of activity.

The report from Passaic dwells more on extra than intra-society matters. Two matters mentioned at length are the re-organization of the medical service of the Paterson General Hospital, and its division into departments along the lines of modern hospital administration, and the plans for a new building for the Paterson Eye and Ear Infirmary, as a celebration of the twenty-fifth anniversary of the institution.

From Salem we learn of the revision of the constitution and by-laws of the society, as well as of the usual number of meetings, at some of which the papers read were of much more than usual interest. Of general affairs we are told nothing.

Union reports the deaths of Drs. E. R. O'Reilly, McElroy, and Probasco. The proceedings of the four regular meetings are reported very fully, and show much active interest by the members. One meeting was devoted to pharmacy and pharmacology, a branch of work of which many physicians, especially the younger ones, are lamentably ignorant. Union also is to be congratulated on the interest shown in legislation at Trenton.

A very full and excellent report from Essex was unfortunately too late to entitle its author to a seat in the House of Delegates. Essex has also revised her constitution and by-laws, and has been interested in legislation. The county society meets only four times a year, but various local or special societies maintain a high degree of professional interest throughout the year. Among these, the William Pierson Medical Library Association is entitled to an especially high place.

This association provides every year a series of lectures on some especial branch of work by men who are recognized authorities on their subjects. This year the subject chosen was the "Brain," and the treatment it received fully maintained the high standard set in the past.

The reports in full accompany this summary. Taken together, they furnish very satisfactory evidence that the medical profession of the State is alive to the necessity and value of develop-



ment through further education, and thus enable us to entertain very bright hopes for the future.

Respectfully submitted,

E. J. MARSH,

Chairman Committee on Scientific Work.

It was moved and seconded that the report be received. Carried.

The Report of the Judicial Council was read by Dr. Philip Marvel. It was as follows:

May 29, 1908.

*To Dr. Philip Marvel, Chairman Judicial Council:*

My Dear Doctor—During the past year I have visited the Component Societies of Essex, Warren and Sussex Counties. In these conservative counties the leaven of Dr. McCormack's visit is slowing working. More frequent meetings are being held in Essex, Morris and Warren. The latter county society is considering the question of joint meetings with the Northumberland County Society in Pennsylvania for the purpose of Post Graduate Study. The two societies are in adjoining counties, and the New Jersey law offers opportunities for anatomical study not possible in Pennsylvania.

Respectfully submitted,

THOS. W. HARVEY,  
Councillor of First District.

June 4, 1908.

*Philip Marvel, M. D., Chairman of Judicial Council:*

My Dear Doctor—As Councillor for the Third District, I beg to report, that I have visited the Hunterdon, Somerset and Mercer County Medical Societies during the past year.

Not having received notice of the meetings of the Middlesex County Society, I have not been able to make my usual visit there.

I have found my attendance at these meetings both profitable and edifying. The men are progressive in their work and show a spirit of interest and cultivation which is far above the ordinary.

The plan of inter-visitation of the members of the different societies of this district has been inaugurated and in a measure successfully carried out.

Dr. J. Hervey Buchanan of North Plainfield, on invitation, read before the Mercer County Medical Society at its January meeting, a most interesting and instructive paper on some of the remote causes of Bronchial Asthma, including a dissertation on the most advanced treatment of this disease.

An excellent paper on the subject "Why Doctors Are Unpopular," was read, on invitation, by Dr. George M. Best, of Rosemont, Hunterdon County, before the Mercer County Medical Society at its March meeting. Both these papers were well received and opened the way for an interchange of visits and papers on a larger scale in the future.

The University Extension course, as formulated by the American Medical Association, has been adopted in its full form by the Mercer County Medical Society. Meetings have been held every Wednesday night from the first of October to the last of May inclusive, at which from one to three papers have been read and discussed.

The Society has provided itself with a complete

Stereoscopic and Reflectoscopic Apparatus, by means of which many of the lectures have been illustrated.

The course will be resumed the first Wednesday in October. The Hunterdon County Society, on account of the widely scattered locations of its members, found it impossible to adopt this course of instruction.

The Somerset County Society suffers somewhat from the same difficulty in regard to the location of its members, but nevertheless has adopted the University Extension course in a modified, though satisfactory form.

No complaints have been made during the past year and a spirit of harmony seems to prevail everywhere.

Respectfully submitted,

WILLIAM A. CLARK.

*Mr. Philip Marvel, Chairman of Board of Councilors, New Jersey State Medical Society:*

It has not been my pleasure to visit all the Medical Societies in this District this year. I received no notice of the Ocean County meetings, and of course was not present. My notice to the Monmouth County Society named the day of my own society, which prevented me from getting to that county. Burlington County always has interesting and instructive meetings. Their society is progressive and they have the work well in hand.

I have attended all the meetings of the Camden County Society, and have been conversant with the work being done by the other societies, and it has been my observation and belief that there is a perceptible spirit of interest and advancement along the lines of progression in the medical fraternity.

Many accessions are being made, much more respect is being given to the recommendations of the Judicial Council, and those who still continue to do contract work seem to act as though they keenly felt the environment of the situation.

Well attended meetings are being held and good practical papers are being read and discussed.

Let me say for the Fourth District that the profession is moving on in line of march to a higher and more influential attitude.

Respectfully submitted,

WILLIAM H. ISZARD.

Atlantic City, June 15, 1908.

*Councillor's Report from the Fifth District.*

In making the following report I regret the fact that I was not present at any of the meetings in Cape May or Cumberland Counties during the past year. Absence from the country in the Autumn, and failure of notice since my return are the reasons I have to report.

However, through correspondence, I have knowledge of the progress being made in these, as well as in the Counties of Salem, Gloucester and Atlantic, with the latter of which it has been my pleasure to meet and observe the work being done.

Speaking of the former, a letter from Dr. A. J. Mander informs me that Cumberland County heartily approved of the recommendations made by your Council, and that Society accordingly appointed committees to arrange the Post Graduate programs suitable for their Society and for the Publicity Bureau.

He also noted that at present there were none of the Cumberland members doing contract work

and that the programs have been of a higher standard and the Society's interest much increased.

I regret that I was not so fortunate in my correspondence with Cape May County, and my report, in so far as it refers to this Society, is wholly from information gathered since my presence in this city; this, however, has been of an encouraging character. The members are growing better acquainted with each other, and with this strengthening of their social ties, their interests and pleasures are alike multiplied, thus adding to their friendly relations and advancing their mutual welfare.

Salem County reports three meetings during the year. Two members have been elected who previously registered as standard bearers of the Hahnemann Schools, with no dismissals for conduct reasons.

In addition to the good work done, the Society has entered enthusiastically into the social aspect as well as the scientific work of the Society, and it is quite noticeable that Salem County has no intention of neglecting either duty or opportunity; the programs are increasing in standard and in interest.

Gloucester County, which has been the leader in this district, continues her past interest in the measures which unite in advancing her future prowess. More and better work characterizes each meeting of this society, and doubtless the reciprocity with other societies, established through her delegates, will stimulate greater individual interests, the effects of which will be felt in the respective counties.

In this feature of their work the members are no less zealous and earnest than in the more direct measures which particularly vitalize the interests in this society. Doubtless this is but a final step which will lead to the consummation of the Council's recommendations of 1906, viz., the exchange of essayists on subjects of territorial interests.

Of Atlantic, my home county, it would afford me great pleasure to record her proceedings in terms most favorable and complimentary. But since for more than eight years certain members of this society have yearly sought the opportunity to disseminate reports derogatory to the names and influence of other members and of a disaffection in the county in a very general way to the members of this society, and so frequent and so unwarranted have seemed these attacks, that patience ceases longer to be a virtue, and silence a defender of justice. Therefore, members of this society request that the State Society in some way take cognizance of the fact that the dissemination of these reports militates to a great degree against the proper advancement of this society in the councils of your State Society, also in the onward march of medical progress in its own society, and is disturbing to the harmony of both organizations. Much as I regret the necessity for the above statement, my duty, as your councilor, is prescribed in the by-laws appended to your constitution, and I would be neglectful of my duty and carelessly responsible for a gross omission, were I to allow these disturbing elements to longer go unmentioned and unrecorded.

Therefore, in the discharge of my duty, and in the defence of those,—the majority of the Atlantic County society, who have labored long, and who will continue to labor hard and well,

for the good of their society, and who seek only such higher ideals and attainments for its members, as shall establish their profession in one harmonious body of faithful and loyal contributors, to the further advancement of a great science, and to the speedier and greater relief of those for whom they continue to labor, seek a just hearing and a proper and truthful rendering of the facts as they are.

Though the foregoing has oft-times shadowed, and in some instances marred what otherwise might have been the proud attainments of this society, I would not have you gather from it that the members have been idle, and least of all, uninterested in the greater achievements of medical advancement.

In spite of the differences, which have been disturbing to the spirit of contentment, and not a little cooling to the ardor of individual enthusiasm, the majority of the members have stood together, striving to further the greater interests of our profession; unifying the organization, and upholding the society's influence for good in the State and in its home community.

During the past year there have been bi-monthly meetings, with program arranged on a modified post graduate plan, with the attendance larger, and, undoubtedly, with more willing contributors than before. It is steadily growing and I believe the membership now being added is of a character that this Society will hear from in the future, and both this and the county society will benefit by the acquisition.

For the present, it is the intention of Atlantic County to continue the bi-monthly meetings except through the summer months.

Respectfully submitted,  
PHILIP MARVEL.

#### GENERAL RECOMMENDATIONS BY THE COUNCIL TO THE COMPONENT SOCIETIES.

To the ——— County Medical Society:

At a regular meeting of the Judicial Council of the Medical Society of New Jersey, held January 23, the following recommendations to the Component Societies were adopted:

1st. The Judicial Council urge the members of the Component Societies to give a more liberal support to the JOURNAL, and that Reporters be requested to forward monthly briefs and extracts from the proceedings to the editor for publication.

2nd. For two years the Judicial Council has urged the Component Societies to consider and take action upon the status of Contract Practice in their respective counties. This year the Council requests that a report on this subject be sent by each Society to the Secretary of the Council on or before May 1, 1908.

3rd. At the Annual Meeting of the State Society at Long Branch, in June, 1907, the President requested the Judicial Council to formulate and recommend a post-graduate course of study to be used by the Component Societies.

The Judicial Council therefore requests that each Component Society appoint a committee of its members to formulate the particular program for post-graduate work best suited to its needs and opportunities.

When such a program is adopted the Judicial Council respectfully requests that if possible a report of the same be sent to the Secretary of the Council on or before May 1, 1908.

4th. The Judicial Council propose the fol-



lowing subject for consideration and discussion by each Component Society at an early meeting, viz.: the "Advisability of a Publicity Bureau, the object of which shall be to organize and direct the promulgation of helpful information on hygienic subjects among the people, and which shall be a ready means of communication between the medical profession and the lay public."

A report on this subject to the Secretary of the Council before May 1, 1908, is respectfully requested.

5th. The Judicial Council approves of the union of forces shown in the co-operation of the profession and the laity in the anti-tuberculosis committees now active in many of our cities, and heartily recommends that the members of the Component Societies of the State lend to these committees all the assistance possible consistent with their position and opportunities.

Respectfully submitted,

Councilor for the District.

THOMAS W. HARVEY,

W. A. CLARK,

W. H. ISZARD,

PHILIP MARVEL.

Speaking more particularly for the general interests of the Component Societies, your Council, in response to the request of your former president in his retiring address, after having written the secretaries of each society, but failing to have a response from only a few, has concluded to recommend consideration of the following suggestions, relating to the post graduate work, to be pursued in the respective Component Societies, viz.:

That, since in the judgment of your Council, no program, however carefully formulated, could be made to meet the greatest and best interests of all the Component Societies in the State, we urgently recommend that each society appoint or elect a committee consisting of three or five of its most capable members whose duty it shall be to draft a program for the ensuing year, adapting the same to the number of meetings held by each respective society and, where practicable, we recommend that each society hold at least monthly or bi-monthly meetings, and that the program be so arranged as to take up first those diseases most likely to be met in the special territorial localities, influenced by the varying seasons, and which are more or less prevalent during different seasons,—and especially after the fundamental branches have received proper attention in a general review.

Your Council further, most urgently recommends that every member of each Component Society avail him or herself of every opportunity to attend as many of these special program meetings as possible, feeling that great benefit will be the just reward of each who carefully looks up the subjects under discussion previous to attending the meetings.

We also recommend the appointment or election of a committee of five to co-operate with the Committee on Publicity Bureau of the American Medical Association, and arrange for a series of addresses and published articles on subjects especially educational and interesting to the lay-people, in the interest of health and hygiene, under the auspices of our State Society.

And your Council, believing that too little consideration and attention is given to social pro-

grams in some of the Component Societies, urgently recommends speedy reforms and greater interests wherever this is the case.

Whilst reporting upon the advances going on in the different societies, your Council is not unmindful of the fact that, as the work now being done, supersedes that previously done, we must not fail to continue our greatest interest in the direction of greater achievements.

At the recent meeting of the American Medical Association, the following plank was recommended for insertion in the platform of both National parties, and for the same purpose in the various States:

"Believing that a vigorous, healthy population is our greatest national asset, and that the growth, power and prosperity of our country depends primarily upon the physical welfare of our people and upon their protection from preventable pestilences of both foreign and domestic origin, and from all other preventable causes of disease and death, including the sanitary supervision of mines, factories, tenements, child labor and other places and conditions of public employment, or occupation, involving health and life, we advocate the organization of a National Department of Public Health, with such powers and duties as will give to the Federal Government control over public health interests not conserved by and belonging respectively to the States, and at present not under direction of the U. S. Marine Corps.

We therefore recommend that this Society join with the American Medical Association in recommending the insertion of the above.

Signed by

THOS. W. HARVEY, First District.

WM. H. ISZARD, Fourth District.

PHILIP MARVEL, Fifth District.

June 18, 1908.

It was moved and seconded that the report be received. Carried.

Dr. Theo. Senseman, of Atlantic City, said that as being also from Atlantic County, he wished to endorse what Dr. Marvel had said. He sincerely hoped that the recommendations and the plea contained in the report of the Judicial Council would become known in Atlantic County, so that the strife there might end.

Dr. Gray said that he felt led to offer just a few remarks by a part of the report of the Recording Secretary, in which the latter had given Hudson County credit, through its Secretary, for having done a good measure of work in increasing its membership by about thirty-eight, which was the bulk of the work done in all the counties of the State. Dr. Gray said that anyone that had ever taken the trouble to read the constitution of the society to find out what the duties of the secretary of a county society are would know that so thorough-going a secretary as Hudson County's must have had his hands pretty full. The record showed him to be a meth-

odical and up-to-date secretary, and Dr. Gray believed it to be only right and proper that a vote of commendation be offered to Dr. Arthur P. Hasking, of Jersey City, for the work that he had done during the past year and was still doing. Such a vote, Dr. Gray thought, would be a stimulus to other secretaries of county societies to try to emulate Dr. Hasking's work. He therefore made a motion to that effect, which was seconded and carried.

Dr. J. G. Edwards, of Williamstown, said that he believed in honoring all to whom honor is due, and would take off his hat to Hudson County, the great pebble on the beach; but that, as a little pebble yet remaining there, he would say that Gloucester County's society had in its membership every physician in the County except one; and Dr. Edwards doubted whether that one was worthy of the honor. While the membership of this county society is not so large as that of Hudson County, Dr. Edwards thought that the latter County could not claim to have all the resident physicians enrolled as members.

Dr. Gray remarked that, as the maker of the motion, he had had no idea of casting a reflection on any of the Secretaries. He would gladly include Dr. George E. Reading, of Woodbury, as another important pebble on the beach. This motion was also seconded and carried.

Dr. Chandler said that there was another important subject that he had been requested to present. The question of child-labor had come up in the State of New Jersey's Legislature several times, and he thought it necessary that the efforts to improve the laws in this matter should have the endorsement of the Society. There was present a lady who had given a great amount of attention to the matter, and Dr. Chandler thought that the Society could listen to her with profit and advantage. He then introduced Mrs. Florence Kelly, of New York.

Mrs. Kelly said that she was grateful for the opportunity to ask the Society to come to the defense of the people who work in the State, as an influential movement was just being started among the Boards of Trade of the cities of New Jersey for the repeal or the very mysterious amendment of the law on the statute books for the protection of children. Years ago, New Jersey lead all the States in the comprehensive and sweeping nature of its law for the protection of children that work, but this is no longer so. New Jersey is the only State in the Union that has repealed an enlightened law for the protection of the children, and has replaced it by a less sweeping and effective statute.

There is now, said Mrs. Kelly, a proposal to take a second grave step backward. There are three respects in which New Jersey is now far behind the other States. One of these is that it is perfectly legal now in New Jersey to have a child fourteen years old work throughout the night. It cannot work longer than ten hours at a time or more than fifty-five hours a week; but in a factory, except a bakery, or in the telegraph or messenger service, a child of this age can be required to work ten hours at night. Until five years ago, the opposite was the case, it having then been illegal to have a child work in a factory after 6 o'clock, P. M., except in glass-works, and in canning and food-preserving establishments. In these, owing to the nature of their work, children were allowed to work through the night. Now all establishments, except stores, can have children at work at night.

In New York this is not true. There, a child must not work after the clock strikes 5. There is a penalty imposed for every child found working after that hour. Children cannot work longer than eight hours in a factory, or nine hours in a store or in the telegraph service.

The second way in which New Jersey does not lead is in regard to its educational requirements. It is legal for a child to go to work at the age of fourteen, even though it does not speak a word of English or read or write in any language. This is not so in other great manufacturing States, of which there are six. In all of these but New Jersey, children must be able to read and write before they go to work. It is proposed in New Jersey to take a backward step regarding their being kept in school and out of work until the age of fourteen.

The third point is that there is no requirement of physical fitness. In New York, when a child wants to go to work, it must go to a medical examiner, who must sign and file a statement that in his opinion the candidate for work is of normal stature and development for a child of fourteen years. This is not required in New Jersey, where a child need only show that it is fourteen years old. No matter how anemic, tuberculous, or wretched it is, it may still go to work.

Mrs. Kelly said that her only excuse for taking up the valuable time of the Society was that its members knew what it means to have children go to work without having undergone a medical examination. She had been requested by the Consumers' League to ask that the Medical Society of New Jersey would not adjourn the meeting without having gone on record in three different ways: First, in defense of such legislation as still remains on the statute books for the protection of children in the State; second, in protest against any reduction of the restrictions against working; and third, in favor of affording the children of New Jersey at least as good protection as is afforded the children in other States. Even in Pennsylvania, said Mrs. Kelly, the child cannot work at night, except in material whose keeping properties are not sufficient to allow of the postponement of the work. Surely, she said, what is not too good for Pennsylvania is not too good for New Jersey. The law of New Jersey should be at least as good as that of the other great industrial States.

Finally, the Consumers' League would beg that the Society would ask the County Medical Societies to keep the agitation on this subject



up; because there was a great difference among the different counties in the general public interest taken in the subject, and in the effectiveness with which the school authorities enforced what law remained for the protection of the children. She made this appeal in the interests of the children of New Jersey and in those of the health, welfare, and efficiency of her citizens. Whenever legislation of this sort is proposed in any of the backward Southern States, the excuse given for not doing any better in the South is that in New Jersey there is no restriction upon the work of children, except that they must not work more than ten hours at night. This was one of the worst things quoted from the conference at Chattanooga, Tennessee, last winter.

Mrs. Kelly then said it was not worth while to take up any more of the Society's time, and again asked that it go on record in regard to the defense of the health of the working children.

Dr. Richard C. Dieffenbach, of South Orange, made a motion that the matter be referred to the Committee on Hygiene and Legislation, with power to secure proper legislation. The motion was seconded.

Dr. Marcy offered an amendment to the effect that the committee be requested to report back to a subsequent meeting of the House of Delegates at this session. The amendment was accepted by Dr. Dieffenbach, and the amended motion was carried.

Adjourned, 1:10 P. M.

#### AFTERNOON SESSION, JUNE 18, 1908.

##### THE HOUSE OF DELEGATES.

The House was called to order at 3:20 P. M.

Invocation, by Rev. James McLeod.

"Almighty God, our Heavenly Father, most Holy, Wise, and Careful Preserver of all Thy creatures and their actions, we give Thee hearty thanks for Thy care over us, and for any zeal we have in Thy worship. We invoke Thy blessing upon Thy servants, gathered here to confer together on matters pertaining to their profession. Endue them with wisdom from on High; direct their counsels in such a way that the results may be in harmony with the Divine Will; and grant that Thy favor, which is life, and Thy loving kindness, which is better than life, be the portion of each one—in the name of Jesus Christ, Thy Son, in whose words we would audibly pray—"Our Father who art in Heaven, etc.'"

Address of Welcome, by Frederick J. Melvin, Mayor.

"Mr. President, Ladies, and Gentlemen:—It affords me great pleasure, on behalf of the citizens of Cape May, to extend to you a sincere and hearty welcome, with all that the word implies. We feel honored to think that you have selected our city for your convention, and hope that the memories that you will take with you after your duties have been performed may be of such a pleasant character that you will make Cape May the permanent city for holding your conventions. We feel somewhat akin to you gentlemen of the medical fraternity; as you administer to the ills that physical flesh is heir to, and we present to the world, we think, (and

pardon our local pride) the greatest seaside resort on the Atlantic Coast. We feel that, in conjunction with the doctors, we can carry out all the assurances that they give their patients when they ask them to go to Cape May. We have an abundance of good water; our sewage system is the finest in the world; we have the greatest beach; and, last, but not least, there is this beautiful hostelry, which we consider surpasses anything on the Atlantic Coast. We trust that you will have the opportunity to see all that we have to offer; and I am perfectly convinced that your impressions of Cape May will be of such a nature that you will return to us soon again."

Address of Welcome, by J. Morgan Dix.

"On my way to Cape May, I took time to glance over the program, and I fear that there has been some mistake. I had understood that I was simply to be the mouth-piece of the physicians of Cape May in bidding you welcome to your One Hundred and Forty-Second Annual Meeting. It seems absurd for me to attempt to address such an array of intelligence as I see gathered here. You gentlemen know that you are welcome. Our honorable Mayor has told you so. The good people of Cape May know you are welcome, and so does your President. If anyone is not satisfied of the truth of this, I will take him aside and talk to him about it while the Society can be going on with more important and profitable business.

My address I wrote coming down on the train, and I do not know that I can read it. Medical men are very peculiar and critical people to deal with. I have never known an occasion, when a medical man was interested in a case and things terminated in a way satisfactory to himself and others, but that he took all the credit to himself; but let the opposite happen, and he will say that it is a perversion of nature, and could not be otherwise. I do not want to take the credit of appearing here to-day; nor do I think that nature should be blamed. Let us place the blame where it belongs. Dr. James Mecray, better known as the Aesculapius of Cape May, is solely responsible for this sad and probably fatal disappointment. However, were I Demosthenes, or Mecray, I could not express the welcome that comes from the heart of every member of the Cape May County Society. It is most like the sincere welcome that we sometimes hear from the bedside. We have all had patients look in our faces and say: "Doctor, you have been a long time getting here, but I am awfully glad you have come." We have been waiting for you a long time; but we welcome you, now that you are here.

We have a great deal to offer you. Our Mayor has already said what I was going to say about this. I do not believe that there is a more healthful resort than Cape May, with her clean, sanitary, and hygienic surroundings. I know of no place where there is less sickness among the residents, barring those that come here for their health; though now and then, a doctor gets sick for lack of physical exercise. I know of no place where men live longer or better, nor of any place where there is less dread of tuberculosis. I know of no place where men die in a fuller assurance of a blissful immortality. Therefore, I feel justified in asking God to grant that this meeting be the most profitable and most pleasurable meeting that we have known. I welcome

you on behalf of the Cape May County Medical Society."

Dr. Ill expressed the thanks of the Society for the welcome accorded them, and said that if they could keep the good weather a few days longer, they were not likely to forget Cape May very soon.

The Report of the Committee on Hygiene and Legislation was read by Dr. Halsey, as follows:

June 19, 1908.

*To the Medical Society of New Jersey:*

Your Committee on Legislation desire to make the following report of their work during the past year.

Early in January at a meeting of the committee held in Trenton, it was unanimously decided that there would be no movement upon our part in any way to recognize or legalize osteopathy. The committee were unanimous in their decision that it would be for the best interest of the medical profession throughout the State to be entirely upon the defensive at first; should the osteopaths introduce their bill, then we would meet this with a substitute to be given to the committee to which the measure should be referred, as a bill which would be entirely satisfactory to the medical men of the State. The osteopaths did not make any movement until the early part of March, when they had a bill introduced by Mr. Colgate, of Essex, and it was referred to the Committee on Public Health, of which Mr. Hines of Essex, was Chairman. The chairman of this committee was very favorable to the osteopaths, and he gave notice to the Clerk of the House that a hearing would be granted on the bill, said notice did not appear in the JOURNAL, and was not published in the Trenton papers, none of the members of the legislative committee had any notice of the said hearing. Dr. Lowery, a member of the assembly, and of the Committee on Public Health, notified the president of the Medical Society of New Jersey, and he with a few physicians from Newark appeared in opposition to the bill. Your committee on legislation feeling that the medical profession throughout the State had been unjustly treated, demanded an additional hearing on this bill; after considerable work this hearing was granted, at which time we had a large gathering of physicians from all over the State who spoke very forcibly against granting the osteopaths the rights and privileges of physicians, until such time as they were qualified. We were satisfied that the able opposition to this measure presented by the medical profession throughout the State, together with the strong representation present, had a very great influence upon the committee. The chairman of the committee was strongly in favor of reporting the bill as presented by the osteopaths, but the majority of the committee were against him and were in favor of reporting to the House, the substitute as decided upon by your committee on legislation. The osteopaths then presented their substitute which gave every osteopath practising in the state of New Jersey, the right to register with the Secretary of the State a copy of his diploma; when this was done he was legally authorized to use the title D. O. We refused to accept this substitute, and Mr. Colgate asked the

unanimous consent of the Assembly to withdraw the original bill. A careful canvass which we made of the House developed the fact that had their bill been reported by the committee, it would not have passed the assembly.

Earlier in the session, a bill was introduced known as the Anti-Vivisection bill, which would place certain restrictions upon the development of scientific medicine, and limit the good work which is being done along these lines. We entered a very strong protest against the passage of this bill and at the hearing which the president of this society conducted from our standpoint; many able men from New York City, Philadelphia and various parts of New Jersey, spoke against this measure. The argument against the bill was so strong that there was nothing upon which our opponents could stand. This bill was never reported. This issue must be watched very carefully in the future as there is an organized movement all over the country for the introduction of such bills and placing very restrictive measures around vivisection. At the last meeting of the American Medical Association this matter was brought up and the Trustees were authorized to set aside a certain amount of money to assist in the defeat of such measures whenever introduced, feeling that if such bills should become a law it would hamper medical men in making new and valuable discoveries, which in the past have so largely been the means of alleviating suffering and prolonging human life.

While your committee assisted in passing a bill for the re-organization of the State Board of Health, it was not satisfactory to us. The committee were unanimous in their opinion that the Lanning bill would come nearer to fulfilling the requirements in the State of New Jersey, than the present act. We used our best exertions to have the board increased from 6 to 8 members, the two additional members to be a veterinarian and a pharmacist of recognized ability. This we were unable to accomplish, and we therefore recommend that the Medical Society of New Jersey express their disapproval of the provisions of the act of 1908, re-organizing the State Board of Health, because said act is retrogressive rather than progressive, and because of the failure of the act to require that the administration of sanitary measures shall be supervised mainly by persons having had medical training and experience in sanitation. We are satisfied that owing to the intimate relationship which exists between human and bovine tuberculosis, that it would be impossible to carry to a successful issue, a fight for the extermination of tuberculosis in this State unless there was a co-operation of the veterinarians. Owing to the passage of the Pure Food and Drug Act a pharmacist should be a member of the State Board of Health as he would be more capable of thoroughly examining foods and drugs. Your committee used every exertion to have the law repealed in regard to the appointment of the present Tuberculosis Commission of this State, for the reason that we were of the opinion that this matter should be entirely within the province of the State Board of Health. The present mode of examining cattle in this State is a farce and it will not be possible to eradicate bovine tuberculosis until purely scientific measures are adopted. In our judgment, this is not possible with the present commission, and should be entirely within



the province of the Board of Health with a thoroughly competent and scientific veterinarian at its head. With the hearty co-operation of the county societies throughout the State, we hope to bring this thing about at the next session of the legislature. After the bill for the reorganization of the State Board of Health had become a law, several members of your committee wrote to the governor for a hearing before the appointments were made and suggested to the governor that in his appointments for the new board, there should be at least two and preferably three, physicians. Notwithstanding that this hearing was desired by the president of our society, by your entire committee on legislation, and numerous prominent medical men throughout the State, it was refused by the governor on the ground that it was unnecessary, as he proposed that in making his selection for members of the incoming Board of Health that they should be business men and that he should be guided by the wishes of the senators from the several counties. The chairman of the committee wrote to the governor that our aim in asking for this hearing was a purely unselfish one and that we thought we might be of some assistance in suggesting medical men of ability, who in view of the great advancement which has been made in hygiene and sanitation within the last few years, would place this board upon the proper footing and one which would compare favorably with the best Boards of Health throughout the country. Notwithstanding this, the hearing was refused, and we have to-day, on the State Board of Health of New Jersey, only one physician.

Your committee assisted the State Board of Medical Examiners in passing some slight amendments to the present medical law which were needed badly to meet certain conditions. While as a whole our work has been fairly satisfactory during the past year, it has not been what it should be. This is largely the result of not being thoroughly organized. In the broadest sense, your committee on legislation has tried to build up and strengthen the influence and standing of the profession in every community by bringing us all into closer touch with each other, and when the time is ripe for rapid action, that we could act as a harmonious whole for the accomplishment of what we deem good for the profession and the community at large. There is no doubt in our mind that the time is ripe when the medical profession, working through the organization, should become one of the dominant factors in the public life for the conservation of the lives and health of the public. We are satisfied that the intelligent laymen should understand something of the work of the physicians, its difficulties, possibilities and limitations, and that the laymen and physician may co-operate and thus limit as far as possible, the ravages of disease and death.

After this is done we are sure that in a very short time a physician will be looked upon as a public health officer, educated and trained to protect the lives and health of the laity. From our observation in the legislature during the last few years, we have found many men who were willing to listen to our argument and when the standing of the medical profession on any measure, was thoroughly explained to them, and it was shown that we were unselfish and only working for the public good, were ready and willing to do anything to co-operate with us. The time is ripe for a systematic plan of organization and education

and when this is developed as it should be, in our judgment, there will be no necessity for your committee on legislation to spend so many hours in the capitol of the State at Trenton, using their utmost endeavors to convince the members of the legislature; but an intelligent public will demand that all these matters be referred to the medical men for their sanction and approval, before such measures would dare become a law. The medical profession is held in less esteem than the profession in theology and law, with reference to the neglected duties of citizenship, those of our profession who have no apparent concern in public affairs, who devote their time and thought wholly to the practice of their calling, negligent or indifferent to their duties as citizens or influential members of the body of political men, are not adding as they should to the enhancement of the station in medicine.

If every county society will promise to take up this work of bringing into closer touch, the laity and the medical men and create a clear understanding between them, it will be doing a magnificent work. We must have intelligent co-operation with the laity if we desire an enactment of needed legislation, the control of contagious diseases and prevention of consumption, and the reduction of the death rate. If we do not start this campaign of education to enlighten the laity, we will have no right to complain if the public derives its knowledge of medical matters from the newspaper advertisements and the patent medicine circulars gotten up for free distribution.

It has been our custom for several years to have a representative of the Medical Society of New Jersey at Trenton, after the bills were introduced, which in our judgment, needed attention. He watched carefully all legislation, interviewed the members, made poll of the legislature and kept your committee fairly in touch with the movement of all bills during the session. Legislative matters are growing to such an extent that, in our judgment, we should have some one on the ground from the opening of the session to its close. If the proper person is obtained, he can assist greatly in shaping legislation and do much good in passing such measures that we may be interested in, or preventing the passage of vicious legislation. We have had such a man, but his salary has been a very meagre one, in comparison to what he accomplished, or in comparison to what the osteopaths paid a man for similar work, and we advise that the committee be empowered to employ a man, paying him a proper compensation for his work, during the coming session of the legislature. There will be so many more matters that will need our attention that this thing seems to be absolutely necessary.

Your committee would suggest that they receive the full support of the State Society in having passed, at the next session of the legislature, more stringent laws if possible than now exists on our statutes, for the stamping out of tuberculosis and endeavor to have, as in Pennsylvania and New York, a substantial sum appropriated by the State to assist in the work for the purpose of establishing public dispensaries, compulsory notification and a systematic plan for the education of the masses. Your committee would urge upon the State Medical Society, the importance of recommending to the various county societies, their taking up of the question of educating the public concerning vital medical matters and thus be prepared to carry on the more complete work which will soon

be asked of them by the American Medical Association. Your committee again calls your attention to the serious consideration by county medical societies of the necessity of electing medical men to the legislature. One good physician in the legislature is a tower of strength against vicious measures that may be introduced. The thanks of the Society are due to the two physicians who were members of the assembly during the last session, Doctors Ramsay and Lowrey. They were ever alert to our interests, keeping us well informed as to the status of various measures and as to the proper course to pursue. Their missionary work among the members should be highly commended and we are satisfied that their influence will be felt for a long time. It has left an impression in the halls of legislation that our aim is purely for the benefit of the public—the alleviation of suffering, and the lessening of mortality.

A report to you would not be complete without mentioning the noble work of two senators, Hon. Joseph S. Frelinghuysen and Hon. J. Boyd Avis. Senator Frelinghuysen was our champion, never too busy to give us advice or assist your committee. He is a firm believer in upholding the high medical standard of the State and to him the Society owes a debt of gratitude. Senator Avis drafted our substitute and was always at the call of the committee for suggestions as to the proper course for us to pursue. As we were authorized to employ counsel, the committee retained him, but under no consideration would he take a fee. He informed the chairman that the work he had done was a pleasure and a duty. This is certainly a good omen for the future, when two prominent members of the legislature are willing to heartily co-operate with the medical men of the state for upholding the medical laws and preventing quackery from gaining a foothold within our borders, and contending that it is their duty to assist in doing everything possible to lower the death rate in the state.

They are certainly able cohorts of ours in what is to be the great fight of the future—preventive medicine—and we should always hold them in grateful remembrance.

During the past year, the committee lost one of its valuable members, Dr. A. K. Baldwin, of Newark. Dr. Baldwin was an earnest worker in the cause of medical education, was always present at the meetings of the committee and worked zealously to assist in the upholding of the medical laws of the State. We feel that we have lost a valuable member in his death. At the suggestion of your committee, Dr. John W. Bennett, of Long Branch, was elected to fill the vacancy. Dr. Bennett is a man of wide experience in legislative matters and has given us valuable advice and has been very zealous in assisting in the work during the past winter. He should, by all means, be retained as a member of this committee. In selection of members of this important committee of the Medical Society of New Jersey, as well as members of the auxiliary legislative committee, only men should be selected who have a taste for the work and are willing to devote their time to good honest labor. The chairman of the committee wishes to thank the medical profession throughout the State for the co-operation that was given at the last hearing against the osteopathic bill. While he feels that much more might have been accomplished than has been done, if there were united action on the part of all county societies in any measure which your committee on

legislation desires help. As to the members of the committee, Dr. Gray was present until sickness prevented him meeting with the committee during the latter part of the session. He did good work and was of valuable assistance to us. Dr. Schauffler also was present whenever possible and succeeded in bringing valuable pressure to bear upon the members of the legislature from his county, that was of valuable assistance to us during the session. Dr. H. H. Davis was always present at the meetings of the committee, and the chairman feels that too much praise cannot be given to him for his unselfish devotion to the interest of the medical profession of the State. The work of the chairman of the committee has been largely one of duty and he feels that it only repays in a small degree the many honors that the Medical Society of New Jersey has given him, and with a heartfelt desire to see the medical men of the State united for their elevation and the proper recognition by the laity of our high and unselfish aim, the alleviation of human suffering, the prevention of all forms of quackery, and the education of the masses so that they will be mighty factors in the prevention of diseases.

We trust that the medical profession throughout the State may be thoroughly organized that it will not only commence, but bring to a high degree of development, the work of organization, the education of the laity and the co-operation of the other professions for the betterment of hygienic and sanitary conditions throughout the State, which will ever redound to the honor and glory of this grand old Medical Society of New Jersey.

Respectfully submitted,  
L. M. HALSEY, Chairman,  
F. D. GRAY,  
WM. G. SCHAUFFLER,  
JOHN W. BENNETT,  
HENRY H. DAVIS.

Dr. Halsey said that he would like to have the suggestions in this report as adopted by the Board of Trustees, as well as the other recommendations, taken up and acted upon by the Society.

It was moved and seconded that the report be received. Carried.

Dr. D. C. English made a motion that the recommendations be adopted. He wished also to offer a resolution, as he felt that the time had arrived for the Medical Society of New Jersey, with its record of having looked after the health interests of the State, to speak in no uncertain terms. It therefore afforded him much pleasure to offer these resolutions, which he would like to see adopted by a unanimous vote. They were as follows:

WHEREAS, the Legislature of this State at the last session enacted a law which has made possible political appointments to the sanitary service of the State, regardless of the professional training and scientific attainments of the appointees; and

WHEREAS, the best sanitary service thus far rendered in any State in the Union has been performed under the direction of a liberally compen-



sated Commissioner of Health and a corps of skilled advisors, therefore,

*Resolved*, That the Medical Society of New Jersey in annual meeting assembled, hereby advocates and strongly recommends the repeal of the present act governing the administration of the laws relating to the public health, and urges the enactment of a law which will provide for the appointment of a Commissioner of Health, who shall be a physician of not less than ten years' experience as a practitioner, with adequate salary to secure the best attainable service, and to provide also for a competent advisory board, appointed by the commissioner and to serve without pay, except for actual expenses incurred.

*Resolved*, That a special committee of five members of the society be appointed by the chair to consider the so-called Lanning Bill and decide whether it, or some modification of it, will best conserve the health interests of our State; keep these sacred interests free from improper political control or manipulation and maintain the honor and reputation of our State for safeguarding the health and lives of our citizens; and that said committee report to the Board of Trustees at a special meeting to be held in the early fall; and that the committee in co-operation with the committee on legislation be and they are hereby authorized and empowered to advocate in the name of this Society, and to secure if possible, the enactment of such measures as shall be agreed upon by them and endorsed by the Board of Trustees.

Dr. English then said that he had offered these resolutions because he believed that the members of the Medical Society of New Jersey were deeply interested in the matter, the Society having been the father of all legislation in the State to put the health interests under organized authority. In the 60's, the Society went before the legislature and the governor and urged the necessity of a law for the protection of the health and lives of the citizens of New Jersey. That committee went before the governor and the legislature, year after year, asking and entreating for the passage of an adequate law. They were turned down each time. They could do little with the legislatures, and saw that the only hope was in going to the people and awakening a public sentiment that would compel the legislature to listen to the pleadings of the Medical Society of New Jersey. A public meeting was called, and was addressed by some of the veteran members of this Society. A State Sanitary Society was formed. Dr. Ezra M. Hunt, of blessed memory, went before the farmers and pleaded with them for the health interests of the State; and a sentiment was aroused that compelled the legislature and the governor to listen to the entreaties of the Medical Society; so that, after long years of effort, they secured a State Board of Health, which has ever since blessed the State and its citizens.

Dr. English suggested an outline for action, and intimated that something like the Lanning bill would be a good law to enact, although he did not feel sure that it was the best that could be framed. He had given a great deal of attention to the matter, and thought it would be well to follow the example of the state of Pennsylvania, where the health interests are better guarded than in any other State in the Union. Dr. Dixon, the Health Commissioner, has, since his appointment, been doing magnificent work, such as appeals to the citizens of Pennsylvania; and the legislature has given the health authorities the right to spend one million dollars in protecting the health interests of that State. New Jersey should not occupy a second place. She should stand at the front in sanitary legislation and administration; and the Society should insist upon having the health interests of the citizens of the state of New Jersey guarded and protected, as they cannot be when the medical profession has been ignored in selecting members of the Board of Health, as has been done under the law just passed.

Dr. English said that, from the very start, he had not liked the law that was introduced and passed at the last session of the New Jersey Legislature. He regarded the paying of the members of that board two thousand dollars a year as a step toward political manipulation. There had been, he said, gentlemen on the old board who served without salary, merely having their actual expenses paid; and he thought that there was every reason to believe that these, or other men as good or possibly better, could be procured to give similar service without compensation. But when men are appointed to this office to which there is a salary attached, it is made possible for the politicians to select men who will contribute liberally to campaign purposes or in other ways serve the politician or political party that secures them the position.

Dr. English said that he had nothing to say personally against the gentlemen who had been appointed, except that they were not men with medical training or experienced in sanitary administration. This, however, was the one vital point in the discussion; and it did seem to him that a Board of Health should consist of at least three able medical men, the business men, engineers, etc., making up the rest. But he very decidedly preferred the passage of a new law which shall provide for a single head—a Commissioner of Health, the best,

most competent one obtainable, even if \$10,000 salary is required, and an advisory board of competent unsalaried men.

Dr. Walter B. Johnson, of Paterson, seconded the motion for the adoption of these resolutions. He agreed with Dr. English in hoping that the Society would put itself on record in such a forcible way that the governor of New Jersey would feel it. He had understood from the committee on hygiene and legislation that the governor had made the statement that he would make his own appointments. Dr. Johnson did not think it necessary for a great society like that of the Medical Society of New Jersey to attack the governor or the members of the Board of Health that has been appointed; but he did think it necessary for the Society to come forward and place itself in the situation in which it originally was, that of demanding of the governor that the health measures be placed in the hands of the physician. They always had been in the hands of the physician, and always should be. Health measures would never have been undertaken, had the work necessary to start them fallen to the lot of lawyers or other professional men, except physicians. It is only the self-sacrificing physician, working in the interests of the public, who is willing to give time and energy to measures that look to the public good. When, in the appointment of a Board of Health, the governor of New Jersey ignores the members of the State Medical Society, Dr. Johnson thought it time for the Society to feel that it had been imposed upon, and that proper measures had not been taken to safeguard the health of the communities represented by the Society, the members of which are willing and anxious to do this work, and had been before there was any salary attached to it. Now that a salary is attached to these positions, they have become a part of the political machine and something that people strive for. Members of the medical profession are proud to be associated with members of a board of health that does good work. If this kind of legislation is to carry these boards into the realms of politics, however, Dr. Johnson thought that others who did not have the health of the communities at heart would be seeking these positions. He believed that a retrograde step had been taken in going back from the old situation in which the health board served without compensation, in a manner according to the bill drawn up by Judge Lanning which he considered the proper

measure. Dr. Johnson argued strongly in favor of a single head—a Commissioner of Health—which the Judge's bill provided for and Dr. English's resolutions endorsed. He took pleasure in seconding the resolutions, and hoped that they would be placed in the hands of the governor in such a manner that he and the legislature might know that the Medical Society of New Jersey was looking into the best methods to be adopted to subserve the interests of the health of the State.

Dr. Britton D. Evans, of Morris Plains, said that he had arisen to a point of order. One set of resolutions had been regularly presented, and another set was put forward for adoption. The first having been seconded, he thought the second set out of order.

Dr. Ill said that the second set of resolutions were only confirmatory of the resolution offered by the committee.

Dr. Halsey said that what he had presented was not a resolution, but a recommendation.

Dr. Evans thought the second set entirely out of order. The resolutions of the Committee on Hygiene and Legislation were admirable and well supported.

Dr. Halsey said that Dr. Evans was mistaken in considering the recommendations of the Committee a resolution. The resolutions framed by Dr. English were prepared according to the recommendations of the committee.

Dr. Evans said that in that case his hearing must be poor. He asked, for his own information and for that of others who did not hear any better than himself, that Dr. Halsey read the report of the Committee on Hygiene and Legislation again.

Dr. Halsey said that it had been brought before the House and duly seconded.

Dr. Ill said that the Chair would rule that the recommendations from the committee were in the form of a resolution, and had been duly seconded.

Dr. Halsey said that Dr. English had been requested to draw up this resolution.

Dr. English said that he had been requested to draw up a resolution to carry out the recommendations of the committee.

Dr. Evans said that no one had mentioned that. The resolutions offered by the committee had not been disposed of, and he wished to know whether those of Dr. English were a substitute for them.

Dr. Halsey said that it seemed to him that the proper solution of the difficulty would be to attend to the recommendations



of the committee first, and then let the matter of Dr. English's come up a secondary resolution.

Dr. English then temporarily withdrew his resolutions.

Dr. Evans said that he would accept that method of disposing of the matter, but that he still maintained that he was correct from a parliamentary standpoint.

Dr. Ill announced that the recommendations of the committee on legislation, which had been approved by the Board of Trustees were before the house. The recommendations were then adopted.

Dr. English, then again offered his resolutions, which were seconded by Dr. Johnson.

Dr. William E. Ramsay, of Perth Amboy, said that he had had the pleasure of working for this bill that was under discussion during the last term of the legislature, although he had done so under a misrepresentation. If he had it to work for to-day, he believed that he would work in an opposite direction. The representation made to him from all sources was that the governor was going to recognize not only the State Medical Society, but the medical profession. In discussing the resolution just suggested by Dr. English, ten years experience had been mentioned as necessary. Dr. Ramsay agreed to that, but he would like to have added that a man should be in active practice. The man selected by the governor had not been in practice for fifteen or eighteen years. This he considered not only unfair, but a direct rebuff; and he felt no hesitation in saying that a good deal of medical legislation that had caused so much trouble during past years had been due to the inactivity of the profession as a whole. The Society should, he said, be congratulated on the work done by the legislative committee of last year; but if the Society expects the endorsement of the senate and assembly of New Jersey, to say nothing of the governor, it would be necessary for them to take a more active part in public affairs. It was only during the antivivisection trouble that the profession as a whole had become positively active.

Medical legislation had then been brought in to such an extent that it began to look to Dr. Ramsay as though there were a concerted effort on the part of the public to oppose the medical profession in every act. It looked as if the chief executive was in league with them, for it was difficult to have anything of a medical nature considered as it should have been. If the medical pro-

fession continue in their present inactive spirit, Dr. Ramsay thought that they could carry the matter so far as to see the United States navy do away with surgeons and put in midwives. He thought that the physician was in duty bound to protect his rights as much as the lawyer to protect his in the legislative halls. The medical profession is fully entitled to the same recognition that has been given to other professions; but until medical men begin to take a more active interest in their defense, only such laws as we now have can be expected.

On vote, Dr. English's resolutions were carried unanimously.

Dr. Halsey then read a series of three recommendations, which were separately voted on and adopted. They were as follows:

*First.* Resolved, that the committee on legislation receive the full support of the Medical Society of New Jersey in having passed at the next session of the legislature, more stringent laws, if possible, than now exist on our statutes, for the stamping out of tuberculosis, and to endeavor to have, as in Pennsylvania and New York, a substantial sum appropriated by the State, to assist in the work for the purpose of establishing public dispensaries compulsory notification and a systematic plan for the education of the masses.

*Second.* Resolved, that the committee on legislation receive the endorsement of the Medical Society of New Jersey as to the importance of recommending to the various county societies, their taking up of the question of educating the public concerning vital medical matters and thus be prepared to carry on the more complete work which will soon be asked of them by the American Medical Association.

*Third.* Resolved, that the committee on legislation receive the support of the Medical Society of New Jersey as to the serious consideration by the county medical societies of electing medical men to the legislature. One good physician in the legislature is a tower of strength against vicious measures that may be introduced.

L. M. HALSEY,  
Chairman.

Dr. Chandler said that the following permanent delegates had presented their certificates and had been approved by the Committee on Credentials: John F. Leavitt, Camden; Randolph Marshall, Tuckahoe; Fred F. C. Demarest, Passaic; Edward F. Denner, Paterson, and Edgar B. Grier, Elizabeth.

Dr. Schaufler made a motion that they be elected as permanent delegates; the motion was seconded and carried.

Dr. Chandler then announced that Dr. James M. Reese, of Philipsburg, had been nominated by Warren County; and that he was present, but had not handed in his credentials. Dr. Chandler made a motion

that his election be deferred until later in the meeting. Seconded and carried.

The Report of the Prize Essay Committee was read by Dr. Kipp. It was as follows:

The Committee on Prize Essays begs to report that five essays were received on the subject of Infant Feeding during the First and Second Years, and that all of them were very meritorious. The one to which we award the first prize of one hundred dollars seems to us to be a paper of exceptional merit, on account of its practical, as well as its scientific character. The assumed name of its author is Neptunes. We now open the envelopes containing his real name and find it to be Thomas N. Gray, of East Orange.

The other four papers are about equally meritorious, and we have had some difficulty in deciding which is most worthy of the prize. We have selected the one written by Henry Esmond for the second prize. Opening the letter accompanying his essay, we find his real name to be Floy McEwen, of Newark.

We would recommend that the other three papers be published in our JOURNAL, if the authors will give their consent.

(Signed) D. C. ENGLISH,  
CHARLES J. KIPP.

Dr. Chandler made a motion that the report be received and that the prizes be awarded. Seconded and carried.

Dr. Kipp thought that it would be appropriate that the receivers of the two awards should come forward and be presented to the Society. It was agreed that this should be done as soon as the recipients could be found and notified.

Dr. Harvey made a motion that the matters referred to in the report of the Council for the Fifth District be referred to the Board of Trustees with power to take such action as they may see fit. Seconded and carried.

Dr. D. E. English, of Millburn, said that he intended to offer a motion, which he wished to explain beforehand. The Laboratory of Hygiene, he said, is an institution that has proved its value. It has been used by the members of the Society freely and with benefit, and they ought to feel very grateful to it. There is one thing about it, however, that he wished to see improved, if possible. When one sends a culture from the throat, for instance, to the laboratory, in a case of suspected diphtheria, the answer comes back that Klebs-Loeffler bacilli have

or have not been found. If the answer is negative, it is rather unsatisfactory; and Dr. English thought that it would be an improvement if the laboratory would do a little further work, if they have the facilities, and send back with a negative answer the information as to whether pneumococci, tubercle bacilli, or the bacilli of influenza were found. When a blood culture is sent for suspected typhoid fever, one gets simply a positive or a negative answer regarding the Widal reaction. Dr. English thought it would be better if the information as to whether the blood contained the malaria protoplasm were given. He suggested that the matter be investigated, to see whether fuller reports could not be obtained from the laboratory, and put this in the form of a motion. He said that if his motion were adopted, he would ask as a favor that he be not put on the committee, on account of geographical situation. He suggested that men in Mercer County or near by be put on the committee. The motion was seconded and carried.

Dr. J. Gaunt Edwards said that it had just occurred to him that the Board of Hygiene could send cases of suspected rabies to be examined. In order to bring this matter before the committee, he made a motion that the committee should consider the possibility of asking the State to establish a Chair for the Examination of Suspected Rabies.

Dr. Mercer thought these motions unnecessary, as the Laboratory of Hygiene was perfectly willing to do what was wanted. All that would be necessary in order to obtain this information was to send a specimen for them to examine and make a report upon. He also wished to say that he thought a vote of thanks should be given to the legislative committee for the hard and successful work done during the past year. He therefore made a motion that they have the hearty thanks of the Society for their efforts. Seconded and carried.

Dr. Henry H. Davis, of Camden, said that it would be in perfect order to adopt the report of the committee as a whole. He therefore made a motion that the Report of the Committee on Hygiene and Legislation be adopted as a whole. Seconded and carried.

Dr. Thomas N. Gray, to whom the first prize was awarded, being present, was brought forward and presented to the Society. Dr. McEwen was not present.

Dr. Johnson offered a resolution, as follows:



WHEREAS, a comprehensive system for the preparation, collection and preservation of records of births, marriages and deaths was established by legislative enactment in this State in the year 1880, and this action was taken in direct response to the solicitation of the Medical Society of New Jersey;

WHEREAS, the records show that New Jersey has the honor to rank among the seven original registration States of the Union;

WHEREAS, certain changes in the Vital Statistics Act, and additions thereto, have been made by the legislature from time to time, for the purpose of increasing the efficiency of the system and of keeping it in full accord with the prevailing practice in the most progressive localities in the United States; and

WHEREAS, amendments that were passed by both houses of the legislature during the session of 1907 and were designed to correct defects that were developed by experience, and that were also intended to cause the methods employed for the collection of the certificates to conform to suggestions promulgated by the U. S. Department of the Census, were vetoed by the Governor;

*Resolved*, That the Legislative Committee of this Society be requested to endeavor to secure the enactment of said amendments at the next meeting of the legislature.

It was moved and seconded that the resolution be adopted. Carried.

Dr. Davis said that, being a member of the Legislative Committee, he thought that it would be well for the members to have some idea given them of what was meant by this. Some of them might not know that the vital statistics, in cities of the first class, are in the hands of the Board of Health; while in cities of the second class, they are in those of the Registrar, who is also the City Clerk. In a city like Camden, requests come from the State every month, asking for the vital statistics; and there are none in the office. Years ago, Dr. Davis said, he had tried to get the legislature to change this enactment, but he had never succeeded in doing so.

While on the floor, Dr. Davis wished to say that it was only fair to state that the admirable health commissioner of Pennsylvania, Dr. Dixon, was appointed politically, and yet proved to be an efficient man for the position. The reason that in Pennsylvania they have such excellent measures is because they have doctors to take a hand in politics. New Jersey owes a great deal to having two doctors in the halls of the legislature. If it were not for their presence, the osteopaths would give ten times the trouble they do. With five or six men of that kind in the legislature, the Society

could get any sort of legislation that it demanded and have a hearing before the governor. In Pennsylvania, there are doctors in the legislature. That is why the people of that State get good medical legislation. The doctor ought not to stay at home when nominations are made, and afterwards say: "Look at that man that has been nominated. How ridiculous!" He should go to the polls and take a hand. If that were done by all, the good men could make any nomination they please.

Dr. Chavanne suggested that the Legislative Committee see that the reports sent out from the Office of Vital Statistics be more full; so that we may have more details of the deaths, as well as of the births.

Dr. Charles A. Rosenwasser, of Newark, presented a communication to the Society from the Dependency and Crime Commission.

Dr. Chandler presented the resignation of Dr. Mary E. Gaston as a permanent delegate from Somerset County.

It was moved and seconded that her resignation be accepted. Carried.

The names of the members of the nominating committee, elected by the delegations present from the component societies, were then read by the secretary as follows:

Atlantic County, Theodore Senseman, Atlantic City.

Bergen County, Henry C. Neer, Park Ridge.

Burlington County, J. Boone Wintersteen, Moorestown.

Camden County, Henry H. Davis, Camden.

Cape May County, J. Morgan Dix, Cape May Court House.

Cumberland County, H. Garret Miller, Millville.

Essex County, Richard G. P. Dieffenbach, Newark.

Gloucester County, Harry A. Stout, Wenonah.

Hudson County, Joseph M. Rector, Jersey City.

Hunterdon County, Francis F. Grim, Baptistown.

Mercer County, William S. Lalor, Trenton.

Middlesex County, William E. Ramsay, Perth Amboy.

Monmouth County, Isaac S. Long, Freehold.

Morris County, James Douglass, Morristown.

Ocean County, Ralph R. Jones, Toms River.

Passaic County, Robert M. Curts, Paterson.

Salem County, Eugene E. DeGroff, Woodstown.

Somerset County, John P. Hecht, Somerville.

Sussex County, Bruno Hood, Newton.

Union County, Thomas N. McLean, Elizabeth.

Warren County, James M. Reese, Phillipsburg.

Adjourned, 4:45.

TO BE CONTINUED.

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## THE INFLUENCE OF OVERWEIGHT AND UNDERWEIGHT ON VITALITY.\*

By Brandreth Symonds, A. M., M. D.

*Chief Medical Director, the Mutual Life Insurance Co. of New York.*

When your committee asked me to prepare a paper on some topic connected with life insurance for this meeting of your society, I was embarrassed to choose a subject which should prove of general interest. The subject should be one which contained a minimum amount of figures with a maximum amount of information and which should be of interest to all. The influence of overweight and underweight upon vitality seems to combine these facts. This subject can be handled with only a few figures if you will accept some assertions in place of figures. Furthermore, the profession as a whole does not realize its importance, nor the dangers which beset those who are far removed from the correct standard of weight, whether above or below. In life insurance we have to measure these dangers for commercial reasons.

In 1836 Quetelet\* published a table of heights and weights based upon the facts gathered from the examination of a moderate number of Belgians. His data were evidently few in number and mostly taken from young people. The table shows one height and one weight for each year represented and those are supposed to be the average height and weight for that year. Thus at age 20, the average height is 5 ft.

7 in. and the average weight is 143; at age 30 the average height is 5 ft. 8 in. and the average weight is 151. These isolated facts agree fairly well with our standard, but they are so imperfect that they are of little practical use.

In 1846† Hutchinson published his table of heights and weights based upon certain data gathered in England. It purports to represent the standard weight for each height at age 30, and is as follows:

TABLE I.

Height	Pounds	Height	Pounds
5 ft. 1 in. ....	120	5 ft. 7 in. ....	148
2 ..... 126		8 ..... 155	
3 ..... 133		9 ..... 162	
4 ..... 139		10 ..... 169	
5 ..... 142		11 ..... 174	
6 ..... 145		6 ft. 0 ..... 178	

For heights from 5 ft. 3 to 5 ft. 9 it agrees with our present standard at age 30. For the shorter heights it is too light, and for the taller height it is too heavy. This table was soon adopted by insurance companies as a guide. Each medical department had its own set of rules by which to calculate the proper weight for other ages than 30. These rules were based upon theoretical considerations and did not give very satisfactory results.

The army and navy have tables of the maxima and minima of both heights and weights by which they select recruits for the different branches of these services. These tables are intended to secure efficiency in physical development, which is above the average of even life insurance risks. For that reason they would not serve

\*Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 18, 1908.

\*Les C'Homme et les Developpements de les Facultes, Brussels, 1836, vol. 11, page 36, et segs.

†Medico-Chirurgical Transactions, vol. xxix., 1846, p. 137.



as a standard, even for the few years which they cover.

In 1897 Dr. George K. Shepherd compiled for the Association of Life Insurance Medical Directors a table of height and weight for each quinquennium from 15 to 69. This was based upon the heights and weights of 74,162 accepted male applicants for life insurance. The weight included the clothing and the height the shoes. In other words, the conditions were as these applicants presented themselves to the medical examiner. Many of the figures were undoubtedly estimates, but the estimates were usually made by trained men. These results were checked by the actual measurements of 5,250 accepted male applicants carefully obtained at the time of examination in one office. The two sets of figures substantially agreed, showing that the estimates were in accordance with the actual facts. At the extremes of age and of height, the number of individuals in any one class was quite small and the curve of weight showed abrupt changes which had to be equalized. The net result was a table of heights and weights varying according to age which was adopted by the leading insurance companies as being the standard.

In 1900 a table of heights and weights varying according to age was compiled by

committee convinced me that this miracle was natural and legitimate.

In view of these two records independently obtained and based upon over 200,000 healthy males in the United States and Canada, I think we may safely assert that we now have a correct standard of height and weight, varying according to age, of men in the United States and Canada.

It will pay to glance over this table for a moment. You will note that the weight rises steadily as you go down each vertical column. Dr. Oscar H. Rogers\* has formulated the rule from a study of this table that each added inch in height calls for an addition of 3% in the weight. This rule will apply, if liberally interpreted, to all but the small men. The weight increases steadily with the age in each horizontal line up to the year 45 among the little men, the year 50 among the middle-sized men and the year 55 and even 60 among the tall men. One is almost tempted to say that the taller the man, the longer it takes him to reach full maturity as shown by his weight. In the very tall this rule does not seem to apply, but the number of these was so few that a small error may have crept in. The largest number of individuals was found at 5 ft. 8 in. of height and this is true for all ages below 60. The age-

TABLE II.

## TABLE OF HEIGHT AND WEIGHT AT DIFFERENT AGES.

Based upon an Analysis of 74,162 accepted Male Applicants for Life Insurance, as reported to The Association of Life Insurance Medical Directors, 1897.

Ages,	15-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69
5 ft. 0 in.	120	125	128	131	133	134	134	134	131	
1	122	126	129	131	134	136	136	136	134	
2	124	128	131	133	136	138	138	138	137	
3	127	131	134	136	139	141	141	141	140	140
4	131	135	138	140	143	144	145	145	144	143
5	134	138	141	143	146	147	149	149	148	147
6	138	142	145	147	150	151	153	153	153	151
7	142	147	150	152	155	156	158	158	158	156
8	146	151	154	157	160	161	163	163	163	162
9	150	155	159	162	165	166	167	168	168	168
10	154	159	164	167	170	171	172	173	174	174
11	159	164	169	173	175	177	177	178	180	180
6 0	165	170	175	179	180	183	182	183	185	185
1	170	177	181	185	186	189	188	189	189	189
2	176	184	188	192	194	196	194	194	192	192
3	181	190	195	200	203	204	201	198		

a committee of the Medical Section of the National Fraternal Congress. This was based upon an analysis of 133,940 applicants of selected risks from the United States and Canada. It corroborated almost marvellously the table compiled by Dr. Shepherd. In fact, there are 111 coincidences out of 112 possibilities in the two tables. Correspondence with the chairman of this

period showing the largest number of individuals was the decade, 23-24, and this is true for all heights.

In the case of women, our standard is not yet assured. Dr. Shepherd analyzed the records of 3,016 female applicants ac-

\* Published in the Proceedings of the Seventeenth Annual Meeting of the Association of Life Insurance Medical Directors, 1907.

cepted for insurance. This number is too small to give accurate results. In general the record shows that at the age of 20 women are lighter than men by six to nine pounds. This difference gradually diminishes with advancing age. By the time the menopause is reached, it becomes one or two pounds only, and after this it may be obliterated.

We must remember that these heights and weights were taken when the parties were shod and clad in ordinary clothing. The shoe of a man will ordinarily raise him about 1 or  $1\frac{1}{4}$  inches. The weight of his clothing, including shoes, but excluding any form of overcoat, varies considerably according to the season. In the neighborhood of New York, a man of 5 ft. 7 in. during the summer will wear 6 or 7 pounds of clothing, while in winter this may rise as high as 12 or 14 pounds. This difference is undoubtedly a factor in the increase in weight during the winter which so many people believe in. For life insurance purposes, we do not attach any great importance to the differences due to clothing, for they are not large enough to modify materially our results.

It is a curious fact that the lowest death-rate does not coincide with the standard. In general terms it may be said that the lowest death-rate is found in the class who are about 5% below the standard, but in the ages below 30 the lowest rate is found among those who are 5% to 10% above the standard. These differences are not very great, and I wish to discuss in fuller detail the more marked cases of overweight and underweight.

Here I must interpolate a definition. The word "mortality" when used in this paper, means the ratio of actual deaths to expected deaths. We calculate the deaths which are expected to occur in a given group of individuals by means of a standard mortality table, usually making an allowance for the benefits of selection in the early years of insurance. This process is quite intricate and need not be given in detail. If this group of individuals shows 1,000 actual deaths and 2,000 expected deaths, the mortality is 50%. If the group shows 2,000 actual deaths and 1,000 expected deaths, the mortality is 200%.

A. Let us first take up overweights. A case is not considered overweight unless it is more than 20% above the standard weight for the height and age. For example, at age 40 the standard weight of a man 5 ft. 6 in. tall is 150 pounds. We

would not regard him as an overweight until he had passed 180 pounds, which is 20% in excess of his standard weight. Even in the classes of smaller excess than this the mortality is increasing, but at this point it begins to be a serious matter. The effect of overweight is influenced by two fundamental factors. These are:

1st. Percentage of overweight.

2nd. Age of the individual.

It may be said that as the percentage of overweight at a given age increases, the mortality rises with it. Take for example age 40. The standard weight for a man of this age, 5 ft. 6 in. tall, is 150 pounds. At 180 pounds he is 20% in excess and at 195 pounds he is 30% in excess. If we take a large group of men of this height and age who weigh between 180 and 195 pounds, we will find that our actual deaths will be 112 as against 100 expected deaths. The mortality of this group then has jumped up to 112%. If we increase the weight of each of these individuals to more than 195 pounds it is more than 30% in excess of the standard, and we now find that the actual deaths in this heavier group will be 130 as against 100 expected deaths. In other words, the mortality has risen still further to 130%.

Take for another example age 65. The standard weight for a man of this age, 5 ft. 11 in. tall, is 180 pounds. At 216 pounds he is 20% in excess and at 234 pounds he is 30% in excess. If we take a large group of men of this height and age who weigh between 216 and 234 pounds, we will find that our actual deaths will be 126 as against 100 expected deaths. The mortality of this group then has jumped to 126%. If we increase the weight of each of these individuals to more than 234 pounds, it is more than 30% in excess of the standard, and we now find that the actual deaths in this heavier group will be 172 as against 100 expected deaths. In other words, the mortality has now reached 172%. Examples could be multiplied, but these will suffice to show that the mortality increases markedly as the weight rises above 20% in excess and to a still greater degree when the weight passes 30% in excess. This holds true for all heights and all ages above 30 years.

Age is another factor of consequence, for a moderate degree of overweight is not a detriment among those younger than 30. People of the age of 22 who are 20% to 30% in excess, will give a mortality of 87% only. This mortality is not much larger



than that of well selected lives. When the weight at age 22 rises to over 30% in excess, the mortality rises to 109%. This, of course, is unfavorable, but compare it with a mortality of 130% at age 35 and of 172% at age 65 in the same degree of overweight.

It may be said then that moderate degrees of overweight in persons below age 30 are not harmful, provided the party does not get actually heavier with advancing years. You will note that this remark refers to actual weight and not relative weight. Our standard increases with advancing age so that an excess of 33% at age 22 is almost exactly equal to an excess of 20% at age 45. If a boy, 22 years old, and 5 ft. 9 inches tall weigh 199 pounds, his weight is 33% above the standard of 150 pounds, at that height and age. When that boy gets to be 45 years old, and his height and weight still remain the same, we now find that his weight is only 20% in excess, for the standard at age 45 is 166 pounds. He has just kept at the edge of the danger zone and people of his class will give an almost uniform mortality, moderately in excess of the normal, irrespective of age.

Beyond 30 years of age the mortality among overweights rises rapidly with the age and with the weight. This will happen in spite of the utmost care in examining and selecting the risks. Nothing seems to help these cases as a class. Even a long-lived ancestry only reduces the excessive mortality a little, but does not bring them within normal bounds. On the other hand, several other conditions make for the worse. A short-lived ancestry is bad. A tuberculous family history is not bad, for in the younger ages it might be supposed that the overweight would tend to overcome a tuberculous predisposition. Increasing abdominal girth is a very serious addition to overweights, and when this exceeds the expanded chest, the mortality is markedly increased. Any other blemish, whether in the personal history or in the physical examination, regularly increases the mortality of these overweights.

In the case of women, we must make our standard a little lighter than that of men, as stated in the beginning of this paper. Having done this, overweights among women are found to be just as bad as among men, in fact, a little worse. They are fewer in number, for women take greater pride in their shape and do not

often allow themselves to become fat, showing in this their superior wisdom.

As regards foreigners, it may be urged that our standard table is based entirely upon selected lives in the United States and Canada, and that it would not apply to another race, like the Germans, who are usually stouter and heavily built. We have found, however, that overweight foreigners are if anything a little worse risks than overweight natives. In truth, human fat seems to be the same wherever found, and has the same effect upon the prospects of life whether in England, Germany, Holland, Belgium, France, Italy, Mexico, or the United States.

B. Now let us consider the effect of underweight. As long as the weight is not below 80% of the standard, *i. e.*, not more than 20% below the standard, the effect seems to be slight. The mortality rises slowly, especially among the younger ages, but the increase is gradual and not alarming. Below this level, however, the mortality rises to a point where it is of consequence, especially in the younger ages.

Below 20 years of age we can expect a mortality of 118% when the weight is from 80% to 75% of the standard, *i. e.*, 20% to 25% below the standard. Ages above 20 years in this group show a fairly uniform mortality of about 95%. As you see, this is not very bad, but on the other hand is not very good.

In the next group, in which the weight ranges from 75% to 70% of the standard, *i. e.*, from 25% to 30% below the standard, the number of entrants in my company below age 20 numbered only 30 in the 30 years from 1870 to 1899. This number is too small to furnish any figures of consequence. Even in the decade 20-29, the total number of exposures only amounted to 299, an average of less than 30 for each year. These gave 2 deaths as against 1.9 expected. The numbers are too small to be of consequence. In the decade 30-39 the number exposed rises to 1,391, and these give a mortality of 100%. After this the mortality is fairly satisfactory, ranging from 90% to 95%.

For weights below 70% of the standard, *i. e.*, more than 30% below the standard, our experience is very limited and too small to divide into different age-periods. The actual deaths amounted to 12 and the expected to 13.5, showing that our selection was reasonably good. The number of entrants below age 40 was too few to give any information. Above age 40 we can

only say that when they are picked with care, these extreme underweights live a good while.

As regards the other factors which modify the influence of underweight, we have to deal with a problem quite different from that of overweight. The influence of age is reversed among underweights. The younger ages are the ones most affected, while the older ages are but slightly disturbed. The mortality increases as the weight diminishes, but even among those who are more than 30% below the standard, the mortality is not excessive.

The association of dyspepsia with underweight is a serious matter in those below age 25. This combination will give us a mortality as high as 150%. I have no doubt that dyspepsia and underweight together in the young is often indicative of incipient tuberculosis, the extent of which is so small that it is not determined on physical examination.

The association of underweight and tuberculous family history has long been recognized as serious, especially in the younger ages. Thus we find that this combination gives a mortality of 180% in the ages below 35. Above that age the influence of tuberculosis depends upon the number of cases in the family. If we have 2 or more cases occurring in the family of an underweight, the mortality is 107% for all ages above 35. In these older ages the underweight who has had only one case of consumption in his family runs but little risk, perhaps for the reason that he takes better care of himself.

As regards women, we must make allowances in our standard weights for the sex. We then find that the lesser grades of underweight from 80% to 75% of the standard give a mortality of only 77%, an excellent result and practically uniform for all ages. For weights below this, the mortality becomes bad, in fact, over 100%, but the cases are so few that no deductions can be made from them.

There is no reason to suppose, however, that underweight women are any worse than underweight men, and I have no doubt that they will give as good a mortality if selected under the same circumstances.

As regards residence, I regret to say that I have no figures pertaining to foreign underweights, nor have I been able to find any statistics. From a general empirical knowledge of risks, native and foreign, I think it reasonable to assume that foreign under-

weights have about the same mortality as native underweights.

C. It is of interest to the profession to know from what causes these overweights and underweights die, for none of them ever dies of obesity or emaciation. There were 1,499 deaths among the male overweights and 1,078 among the male underweights. These numbers are sufficiently large to enable us to subdivide them into all the important classes, and most of the leading individual classes. I will compare these deaths with the figures obtained by Dr. E. J. Marsh, a former president of your society, from the entire male mortality of the Mutual Life Insurance Company.\* It is proper to do so, for these deaths form a small part of the material which he used. We will, therefore, be comparing results which are homogeneous so far as their origin is concerned. Any differences may be ascribed to the influence of overweight or underweight. These differences are in some cases considerable and of much interest.

The class of acute general diseases includes all the acute infectious diseases except a few which are distinctly localized, like pneumonia. Overweights suffer a little more severely from these than underweights, the experience of the latter being nearly identical with the general experience. Typhoid fever shows a little better among the underweights, while malaria is about the same in both. Influenza is a little worse in both than in the general experience.

Overweight seems to secure a marked degree of immunity from tuberculosis, for we find among them not one quarter of the amount of fatal tuberculosis which we find in our general experience and hardly one-sixth of what we find among underweights. The large amount among the latter is partly due to the fact that the underweight was only a symptom of a tuberculosis, which was not recognized at the time of the examination. After allowing for this, however, we are tempted to say that underweight predisposes to tuberculosis or rather to fatal tuberculosis, and the reverse is the case with overweight.

Cancer among overweights and underweights, men and women, shows no appreciable difference from the general experience. Diabetics are scarce among the underweights, hardly one-half of the general

\* Mortality Statistics of the Mutual Life Insurance Company of New York, from 1843 to 1898, New York, 1900. See table on next page.



experience, but they are five times as numerous among the overweights.

If we group together the different forms of cerebral congestions and hemorrhage, cerebral apoplexy and paralysis, we find the overweights are a little in excess as compared with the general experience, while the underweights are distinctly below the average in this group. This difference also holds true for the various forms of mental alienation, grouped together.

Organic diseases of the heart show a decided excess among overweights, and as great a deficiency among underweights.

Pneumonia is nearly twice as fatal among underweights as among overweights, although the prognosis in pneumonia is usually regarded as more serious in an overweight than in an underweight. Taking these two factors into account, it would almost appear that overweights have a certain immunity from the pneumococcus, while the

underweights are more than usually susceptible.

Cirrhosis of the liver is three and a half times as prevalent among overweights as in our general experience. This undoubtedly points to alcoholism, for statisticians generally consider that hepatic cirrhosis is a very accurate index of the alcoholic habits of a class. Among the underweights, it is below the normal, as are also the other diseases of the digestive system, thus showing their moderation in food as well as drink.

Bright's disease, both acute and chronic, is nearly twice as prevalent among overweights as in our general experience. This excess can probably be ascribed to the habit of over-eating and over-drinking which produces both the overweight and the Bright's disease. Among underweights it is a little below the average.

In Class IX there were eleven deaths

TABLE III.

Showing the Percentage of Deaths in all Classes and some Individual Diseases among Overweights, Underweights and the General Experience of The Mutual Life Insurance Co.

Causes of Death.	Overweights.	Underweights.	General Experience.
<b>Class I.</b>			
General Diseases—Acute .....	9.67	9.28	8.90
Typhoid fever .....	4.00	3.06	3.94
Malarial fever .....	1.27	1.21	1.24
Influenza .....	1.47	2.04	1.00
<b>Class II.</b>			
General Diseases—Chronic .....	13.07	24.59	19.56
Tuberculosis .....	2.93	16.98	12.42
Cancer .....	4.40	5.57	4.18
Diabetes .....	3.40	.65	1.25
<b>Class III.</b>			
Diseases of the nervous system.....	19.08	12.16	17.44
Cerebral congestion and hemorrhage-cerebral softening, paralysis .....	14.14	8.47	12.32
General paralysis and other forms of mental alienation .....	1.80	.84	1.30
<b>Class IV.</b>			
Diseases of the circulatory system.....	16.01	11.69	11.85
Organic diseases of the heart.....	12.94	8.54	10.76
<b>Class V.</b>			
Diseases of the respiratory system.....	8.54	15.78	11.86
Pneumonia .....	6.87	12.34	9.03
<b>Class VI.</b>			
Diseases of the digestive system.....	10.61	8.54	10.19
Cirrhosis of liver.....	3.47	.65	1.00
<b>Class VII.</b>			
Diseases of the genito-urinary system.....	12.01	7.42	8.78
Bright's disease and nephritis.....	11.07	5.30	6.66
<b>Class IX.</b>			
Diseases of skin and cellular tissue.....	1.20	.47	.50
<b>Class XI.</b>			
Old age .....	None	2.04	1.50
<b>Class XII.</b>			
Violent causes .....	7.07	5.57	7.42
Casualties .....	4.20	3.43	5.21
Suicides .....	2.87	2.14	2.20
<b>Class XIII.</b>			
Ill defined causes.....	2.60	2.50	3.98

from carbuncle among the overweights, where there should have been but two. This is a great excess, but I am inclined to think that many of these cases were associated with unrecognized diabetes, which would be properly described as the cause of death. If this surmise is correct, diabetes becomes a still more serious factor among overweights.

Casualties among both overweights and underweights are a little below the average. This may show that they take care to avoid injuries, or else it may be that the abnormal weight, whether above or below the standard, prevents them from entering occupations which are liable to fatal accidents.

No overweight, whether man or woman, died of old age or senility according to our record. On the other hand, old age or senility caused twenty-two deaths among the male underweights and five among the female. Furthermore, it should be noted that no overweight attained the age of 80 years at death, while on the other hand 44 underweights passed this age, and two of them even reached the age of 90 before dying.

Deaths among the women, whether overweight or underweight, were too few to permit any elaborate criticism. In so far as the small material could be analyzed, it corroborated the male experience in both classes. No deaths occurred from puerperal causes among the underweights, and only 4 among the overweights, this being about the average experience of the Company among women.

D. Now, let us sum up in a general way the differences between overweights and underweights. The mortality among all those, irrespective of age, who are between 20% and 30% below the standard weight, is 96%, while the mortality of all, irrespective of age, who are between 20% and 30% above the standard, is 113%. These figures alone would show that overweight is a much more serious condition than underweight. On the other hand, we must take into account the fact that until recent times overweights were accepted more freely by insurance companies than underweights. To put it in another way, underweights were selected with more rigid care than overweights. The old idea that an overweight had a reserve fund to draw upon in case there was a run on his bodily bank was prevalent, although it was recognized that excessive fat might be harmful and should exclude the risk, on the ground per-

haps that it was a form of capital which was not active. Similarly, an underweight was considered to be under-capitalized, and if his bodily bank had to go through a panic like pneumonia, or hard times like organic heart disease, he would become insolvent and bankrupt. As a result of this method of thought, our underweight mortality is rather better and our overweight mortality rather worse than if both sets had been accepted under exactly the same conditions. But, even if we make full allowance for the difference in selection, I am convinced that the same percentage of overweight is a more serious matter than if it were underweight. The excessive weight, whether it be fat or muscle, is not a storehouse of reserve strength, but it is a burden which has to be nourished if muscle, and which markedly interferes with nutrition and function if fat. This does not apply to the young, those below 25 years of age. Here a moderate degree of overweight is much more favorable than underweight. In fact, up to age 25 an overweight not to exceed 110% of the standard is upon the whole good for the individual. It seems to indicate a certain hypernutrition and robustness of physique which is favorable to the subsequent life. Underweight among these young people on the other hand is unfavorable, and in some cases indicates commencing disease or the tendency thereto. But, when we pass the age of 30, these conditions are reversed and the difference between overweight and underweight in their influence upon vitality becomes more marked with each year of age.

Of course, for the best interests of health, one should be near standard weight, and that is the sermon which you should preach to your patients. Impress upon them the advisability of their being within 10% of the standard, for within that range is found the lowest mortality and the greatest vitality.

#### DISCUSSION.

**Dr. Richard Cole Newton, Montclair,** opened the discussion, as follows: Lord Bacon formulated, many years ago, certain rules of longevity. "You won't live long," he said, "if you have soft, fine hair, a fine skin, quick growth, a large head, early corpulence, short neck, small mouth, brittle and separated teeth and fat ears."

On referring to the specialized mortality investigation of the Actuarial Society of America, published in 1903, one finds that the insured are divided into a number of classes, according to their occupations, ages, weights, nationalities, etc., etc. Of these classes, I have selected three to



which I shall particularly refer for the purpose of this discussion, namely, classes 59, 60 and 61.

Omitting the young entrants, Class 60 (those weighing over 30 per cent. above the normal with one or both parents dead below seventy years of age) have a mortality slightly greater than 50 per cent. above the expectation. Class 59 (those weighing over 30 per cent. above normal with neither parent noted as dead below seventy) have a similar mortality, and Class 61 of the same weight, with girth of abdomen greater than the expanded chest up to twenty-eight years of age, are fair, average risks. After this age, they are notably bad. Those of Class 60 being on the average, about as bad as those of Class 61, contrary to the common expectation.

Hence we see that in obese subjects, heredity has really little influence in determining the longevity. To my mind, this is powerful evidence in favor of the contention that obesity is itself without any ulterior consideration, a predisposing cause of premature death. As Osler has said, "An extra pound of fat means an extra mile of capillaries." It is not surprising, therefore, that fat people, as a rule, have weak hearts.

Reverting to the specialized mortality investigation of the Actuarial Society of America, with which, naturally, Dr. Symonds is more familiar than I, we note various other interesting facts. One is that \$20,000 risks are notably bad, which seems to indicate that wealthy insurers are short lived. It was Hesiod, I believe, who said, that "heroes and luxuries do not spring from the same soil." In the same way, good life insurance risks are not as a class the people who can afford \$20,000 policies. On the other hand, commercial travelers, contrary to what one would be apt to believe, are unexpectedly good risks. In spite of the hardships of their lives, and their irregularities, and perhaps immoralities, they outlive their expectation, while the well-to-do and the specially well fed, do not by any means live as long as the longevity tables say they should.

Probably one reason for the unexpectedly long lives of commercial travelers is, that traveling itself is wholesome. As man was originally a nomad, a wanderer on the face of the earth, as he pursued his game, or fled from his enemies, travel is natural to him and beneficial to his health. Hence the "wander lust," the desire for movement and change of scene which is born in us, and should receive due consideration. Hence we frequently observe that any change of climate even to a distinctly worse one, may be beneficial.

To revert again to the report of the Actuarial Society, we observe that, of the classes whose weight is less than 12 per cent. below the normal, the deaths very slightly exceed the expectations. Of those whose weight ranges from 15 per cent. above to 12 per cent. below the normal; or people of about the average weight for their ages, the deaths in some classes exceeded the expectation, and in others were considerably below it. As Dr. Symonds has pointed out, in cases above middle life an increase of weight of over 20 per cent. makes the risk bad, and over 30 per cent. so bad that the mortality has reached 172 per cent., or nearly seven deaths where the tables call for four.

Another point that the Doctor brings out very strongly is that below 30 years of age obese people are good average risks, but after that, if their weight continues to increase they become very bad risks. In other words, the heart, vessels

and kidneys stand the extra strain of the load of fat until middle life fairly well and then begin to give way under it. The old saying that fifty-four is man's climacteric, is quite true for a large percentage of obese subjects. We have all of us known of numbers of heavy men, high livers, short-winded, rubicund and averse to physical exercise, who have dropped off at about fifty-four or fifty-five with apoplexy, Bright's disease, etc.

According to certain tables quoted by Dr. Caruthers certain stout risks in England are better than thin ones. This is contrary to Dr. Symonds' experience, and is quite likely more or less due to differences in climate between England and America. Young stout risks are better than young thin risks in this country, but old thin risks are always good, and on the average outlive their expectation.

**Dr. Alfred A. Woodhull, Princeton,** said that as might be inferred from his name appearing on the program to lead in the discussion, he had had the opportunity to read Dr. Symonds' very excellent and elaborate paper; but he had not been aware that one might present his comments in writing, or he should have been glad to put his remarks in better form than he would be able to without notes. The essay, as would be appreciated, when it appears in the Journal, is valuable, and it is differently expressed, but curious coincidence in rules, which is apt to escape notice when the paper is merely heard or is not carefully read. This is that military experience has reached substantially the same result for the selection of recruits within the military years from eighteen to forty-five. The official reckoning is more simply stated and seems arbitrarily made, but it is very convenient and is in accord with the insurance scheme. The gradual increase in weight under the insurance schedule is a certain percentage, and to determine it percentages must be calculated. The weight of a recruit for military service should be two pounds to the inch, with five pounds additional for every inch above five feet seven inches. This to a person unfamiliar with the fact, does not seem reasonable, but it works out all right and practice confirms theory. The weight is that of the man himself, stripped, and does not include that of his clothing.

Underweight and overweight in themselves amount to little or nothing; they are merely indices of certain conditions that may lead to unfortunate results. Personally he would lay much more stress upon the vital capacity and the chest expansion than upon the question of underweight or overweight. A man of good heavy weight should have a broad and deep chest, but he may not. The point so graphically put by Dr. Osler—that every pound of fat means an extra mile of capillaries, Dr. Woodhull had learned as a student from Professor Samuel Jackson at the University of Pennsylvania, who on that account warned against reckless bleeding in the obese. Venesection was not at all common even in those days and it is unfortunately not used in many cases where it would be advantageous. But Dr. Jackson while not discouraging bleeding in selected cases, cautioned the students against much bleeding of fat people. The capillaries permeate the whole body, so that in a fat person the heart has much more work to do without thereby being a corresponding increase of energy. It is, therefore, much easier for the system to be disastrously affected, when the volume of blood at

large is lessened, leaving this great but comparatively useless multitude of vessels to be supplied. Discharges of any character, whether a pure hemorrhage or a serious flux, for this very reason are much more liable to do damage where there is much adipose tissue than in those who are not so stout. Dr. Woodhull thought that overweight from any cause was to be avoided and that there could be relative incapacity from muscular grossness as well as from mere fat.

There were one or two other points that the speaker had in mind, but the paper, he said, speaks so well for itself, and the hour being late and time passing more rapidly to listeners than to one on the floor, that he would refrain.

### ENCOURAGEMENTS IN THE PRESENT STATUS OF THE MILK PROBLEM.\*

By Alexander McAlister, M. D.,  
Camden, N. J.

Viewed from the present status of the milk problem every new step in the progress of substitute feeding of infants during the past fifty years only impelled us to a position closer to whole milk—*milk for milk*. That is where the circle began and that is its rational, logical and happy ending. Powders of cereal origin, condensed milk, sterilized milk, pasteurized milk, laboratory milk, home modified milk, milk that is the whole round. All of these changes may be said to have come about during the brief period of twenty-five years and coincidental with the rise and spread of antisepsis, or the development of that great searchlight of medical science—bacteriology. But mark that this latter development did not bring about the changes in substitute feeding.

True, our increasing knowledge of bacteria has had much to do with certain changes of the milk problem, particularly in recent years. This, however, was only a minor part. Our new standard for judging of results of artificial feeding, adopted about the time all infants unfortunate enough to be deprived of mothers' milk were put on sterilized cows' milk, has brought about the changes. We began to study the mortality rate!

While immediate results under the older methods appeared to be fair, even good, the mortality continued high. What was the cause? The feeding was faulty. Here was the new and better standard—the true test of merit. Breast milk would have saved

many that perished. That could not be gainsayed. A substitute food, to have commendable merits, must yield results somewhat similar to those of breast nursing. The prevalence of rickets, scurvy, and marasmus; the marked morbidity of children, and the continued high mortality rate among the young, could only be attributed to the substitute food.

In the former standard for judging results *fat* was held in too high regard. The fat baby was the prize and its superabundance of adipose tissue was permitted to effectually mask, in many cases, a marked morbidity, and perhaps a constitutional taint back of it. When later in life the child fell a victim to an intercurrent malady the method by which it had been fed in infancy was not suspected as having been at fault.

In the more rational standard of value, vigor, robustness, vitality, power to resist and repel disease are the criteria of merit. Only such results of substitute feeding will reduce the rate of infant mortality. Weighed in these modern, scientifically adjusted balances, cereal powders, sterilized milk, condensed milk, and pasteurized milk, excepting only for special and temporary uses, fall wide of the weight once attributed to them.

The future has grown increasingly auspicious of better results in infant feeding. The general practitioner who studies his own field most carefully is rewarded with the greatest reasons for a cheery optimism. The rate of mortality for the first year is still in many places high, much too high, higher it is said than for any other year between one and ninety-one; but for all this it is true that an era of better figures has begun.

From time immemorial milk has been recognized as a perfect natural food. Owing to its low keeping qualities we turned to substitutes basely foreign to breast milk. We now view milk more particularly as an extraordinary natural food—the very best for the very young, the delicate and the invalid. Milk is more than an ordinary perfect ration, since it possesses properties peculiar to living substances. Milk has qualities similar to those of blood of which it is the most direct product. In the low keeping qualities of milk is wrapped its extraordinary value as a food for the very young and delicate.

In the past much attention has been given to the best methods for making the complex casein curd of cow's milk more easily

\* Read at the 142d Annual Meeting of the Medical Society of New Jersey Cape May, June 18, 1908.



digestible in the human stomach. To-day we recognize that the shorter the interval between the milking and feeding periods the less formidable is the question of digestion. In other words, milk that is less than twelve hours old is to a large degree ready for absorption. When the baby's milk for to-day is to-day's milking the problem of feeding is not so difficult. Whole milk consists of living cells suspended in a natural emulsion. These living elements are absorbed and assimilated without the usual labor of preliminary digestion. They are leucocytes that in character and action do not appear to differ from the leucocytes of the blood, and are present in recently drawn milk in enormous numbers.

Besides these elements, active ferments bactericides, alexins, opsonins, and other delicate but valuable elements go to make raw milk at once the most nutritious and most perishable of food stuffs. We now know that these constituents of milk which make it an extraordinary food are all destroyed by age, natural reaction, bacterial contamination and heat. In other words, milk that is more than twenty-four hours old, or that is sour, or that is overrun by the luxuriance of bacteria, or that has been subjected to prolonged heat, is devoid of the natural salutary bactericidal action of milk and the stimulating and regulating effects of enzymes upon absorption and assimilation and greatly taxes digestion.

There never was a time when the value of whole milk was more generally appreciated, nor when the facilities for supplying good fresh milk were better than at the present.

The establishment of milk laboratories and the organization of medical milk commissions throughout the country, the recent exhaustive Federal investigation of the general milk question, the large space given the problem of infant feeding in current medical literature, all indicate a widespread growing interest in the vexing but not impossible problem of supplying to every market a good whole milk. The recent organization of all American milk commissions cannot fail to be productive of great good in arousing the medical profession in all quarters.

Nor is the good work done all the direct result of the efforts of a few. Reflexly vital results appear in many quarters. Dairymen wake up to the demands of the day and set about to meet them. The appearance of only one ideal product in any market at once raises the milk standard in

that quarter and brands with shame the product that will not bear inspection. True, the ideal products are higher in price and tend to raise the general price of milk, but they are worth the higher price which is nowhere prohibitive. It is inhuman not to shun impure and vile food stuffs at any price. It should be branded a criminal offense to give the very young and delicate an impure milk.

The present growing interest in the worldwide campaign against tuberculosis may appear at first thought to detract interest from the question here considered, but this is only relatively the case. The demand for the ideal in our milk supply has always come primarily from our high appreciation of the needs of delicate infants and the sick, hence in fact from the clinical use of milk. In any treatment of tuberculosis a liberal supply of fresh whole milk is of as great importance as during the first years of infancy. But quite apart from this it is at least to be hoped that the general interest that is being centered in the open air treatment may prove the most effective single lesson in personal and domiciliary hygiene the race has ever had. If this hope is realized infants dependent upon substitute feeding will be the better for the campaign through more open air life and better food.

Then the present ramification of every section of the country by railroads, the clamor of all cities for rapid transit, the practical solution of the ice problem and improved methods of cold transportation, make the facilities for shipping milk generally adequate. The recent Federal investigation shows that the general market milk of Washington, D. C., is, for the most part, old, stale and dirty. This, however, is not owing to any great lack in shipping facilities, but to absence of concerted interest in a dogged agitation for something superior. No fancy process can make such milk fit for clinical or family use. It is dead, inert, decomposed and relatively indigestible, if not positively dangerous. But the vital point is that there is milk to be had in Washington and elsewhere that is not old and dirty, that is at most not over twenty-four hours old, and that has been properly handled. Only such milk should deserve the name of milk or be employed clinically.

The recent federal investigation, already referred to, concludes that heating of milk prior to its reaching the home is justified only when used temporarily and as an ex-

pedient, since it tends to devitalize and only makes milk more susceptible to subsequent bacterial contamination. Pastuerization will make a bad or suspected milk safe but never an extraordinary clinical food. It may even provide the very best milk that is to be had for the time being, yet two facts should ever stand out over all, namely, that much too generally the dealer alone is benefited by commercial pastuerization and that ideal milk is so pure that it does not need pasteurization.

The purport of this paper is not to favor a wholesale and indiscriminate return to the use of raw market milk. That would be unwise and the teaching unsafe. Nor is it the purpose to plead for the use of none but whole milk in general substitute feeding. That would often entail a needless hardship. But it is the object to urge the use of only ideal whole milk for the very young and delicate. In this practice simple methods of dilution or modification, possible in any home, yield superior results because of the greater ease with which fresh whole milk can be digested.

Finally, in every market this ideal milk may be had for the price of the searching. The market that falls short cannot be shown up too early or too relentlessly.

#### DISCUSSION.

**Dr. H. L. Coit, Newark,** said that he would like to comply with Dr. McAlister's request by making a few remarks upon his paper. He had supposed that Dr. McAlister's paper was to treat of the pure milk propaganda, and so he would make a brief report upon this subject.

The pure-milk movement in the United States, he said, had its origin in the Medical Society of New Jersey at the meeting in 1889. The Federal Government, through the Agricultural Department, has issued a pamphlet descriptive of the movement, giving its details and minutiae in a recent bulletin on "Certified Milk," by C. B. Lane. The Hygienic Laboratory has issued another on "Milk in Its Relations to Public Health," with a chapter on Certified Milk. It is Bulletin No. 41, Public Health and Marine Hospital service. In it Assistant Surgeon General John W. Keer, describes the initial step taken nineteen years ago in the Medical Society of New Jersey. This professional relation to the milk question has been so far developed that it is now possible to obtain "Clinical Milk" or "Certified Milk" in many cities through the efforts of the Medical Milk Commissions. These commissions are appointed by county medical societies or other responsible medical organizations.

Certified milk should always be distinguished from milk produced under municipal regulations. This latter grade of milk is now well defined in New York City by the Health Department as "inspected milk." It is not consonant with the purposes of the medical commissions to supersede the municipal machinery of the health depart-

ment employed in large cities to look after the general milk supply.

The medical commission wants clinical milk that is so far above the requirements of law that it is not strictly under the law at all. The city or state health department attempts by ordinance, inspection and otherwise, to get what it wants through the enforcement of law, or the stimulus of comparison by the score-card, and the enforcement of ordinary cleanliness—it wants clean milk. These agencies should not be in conflict; each has its legitimate field; both are working toward the common object of raising the standard of milk to a point where the methods suggested of heating milk to safeguard the supply will be unnecessary.

It would be better to distinguish only three grades of milk; "certified" or clinical milk, "inspected" or municipal milk, and "doubtful" or dangerous milk. The latter should always be cooked to make it safe for domestic use and not simply pasteurized.

This professional movement for pure milk has grown very fast. In Chicago, a few weeks ago, was held the second annual meeting of the National Association of Medical Milk Commissions in the United States; and it transpired that thirty-four milk commissions met together to report and compare their work. The association includes physicians, research workers and professional hygienists, numbering nearly two hundred members. Dr. Rosenau, Dr. Park, Prof. Ravel, Dr. Schroeder, and many such men, vied with one another in their earnest discussions on every phase of this vital question. The pure-milk movement is now a widespread national issue as well as a medical issue of great importance.

**Dr. Henry Chavanne, Salem,** said that he had found himself to be heterodoxical on the milk question. He thought that there are many points about milk as a diet, particularly in children, that require consideration. Dr. Goble, of Rochester, N. Y., had made the statement that during the three summer months of 1907, 144 children had died there of diarrhoea. Of these, 120 were bottle-fed, the remainder being breast-fed infants. He had also made a statement that only 25 per cent. of the American women nurse their children. If the statistics were gathered at Washington, and if the question were followed up impartially, Dr. Chavanne thought that it would be found that a great many such statements could be substantiated. President Roosevelt's reference to race suicide was emphasized by the statistical evidence of deaths of children a year old and under, American born, and that because of this fatality the American type is being obliterated. He wished to make a few remarks concerning the results of his own researches.

Whole milk, as we get it, is legislated. The cow is legislated to a standard that seems to be impossible, except with the thoroughbreds. There must be a large percentage of solids in the milk; and not a dairy in the State of New Jersey would be allowed to send milk to market unless the milk reaches that standard. There are no cows outside except the Jersey and Guernseys, that will produce milk of that standard; and they will not, unless fed on an artificial diet prepared by removing the carbohydrates so as to produce as little fat as possible in the animal. This diet stimulates the cow to the high-



est point of secretion, and therefore sacrifices their proteids of the natural economy. These are in such high percentage as to bring up the standard. Dr. Chavanne said that he could sustain this statement, and that he could assure the Society that not five per cent. of the Jersey cows in New Jersey could raise their own offspring and not produce diarrhoea in them. If the offspring of an animal cannot be nourished by its own parent's milk, how can we expect that a child which is much more delicate, would be sustained by this secretion. It is absurd to expect that whole milk, or any other milk produced by this legislative standard, will support a child. A cow's offspring is supposed to mature in eighteen months. Consequently the normal product of that animal is of such properties as will mature the calf in flesh, blood, and bone in that time.

### REMOTE PAIN FOLLOWING ABDOMINAL OPERATIONS\*

Wm. Edgar Darnall, A. M. M. D.,  
Atlantic City, New Jersey.

The significance of the presence or absence of pain associated with abdominal and pelvic conditions has always presented a most interesting study and one which has been attended with great uncertainty. This uncertainty has been due to many factors, the chief of which has been our lack of an accurate knowledge of the sensibility of the various parts of the abdominal and pelvic contents. Observations upon the sensibility of the parts involved have been made by many surgeons while operating under local anæsthesia; but it is to Lennander, of Sweden, to whom the greatest credit is due for the knowledge we possess of the sensibility of the pelvic and abdominal structures.

Sensations of pain are not found in the abdominal organs themselves but only in those parts supplied by the phrenic, the lower six intercostal, the lumbar and sacral nerves. Quoting Lennander: "It is my opinion that all painful sensations within the abdominal cavity are transmitted only by means of the parietal peritoneum and its subserous layer, both of which are richly supplied by cerebrospinal nerves around the whole of the abdominal cavity. For example, pain is occasioned by the placing or the removal of gauze compresses between the viscera and the parietal peritoneum, by the dragging forward of the cecum, of the vermiform appendix, or of any other organ whose normal attachment to the abdominal cavity is put on the

stretch; and the same principle applies to the stretching of any abdominal adhesions which may connect the viscera with the abdominal wall. On the other hand should a compress lie between the viscera without coming in contact with the abdominal wall the patient experiences no pain on its removal. Similarly, no sensation attends the stretching or breaking up of adhesions which have no connection with the abdominal parietes."

I do not propose to discuss in this paper the pain immediately following an abdominal operation but rather the persisting pain that is present sometimes after the patient leaves the hospital and falls again into the hands of her attending physician, who sometimes exhausts all his resources for relieving pain, and is harassed and worried because the operation has not relieved his patient as he had hoped and promised it would. This pain may persist for a few months to a year or two, gradually disappearing with the absorption of slight adhesions, or in some cases persists indefinitely, all this depending to some extent on the seriousness of the operation and the complications that have to be met with. Where the inflammatory processes have been widespread, matting everything together with one crop after another of dense adhesions, the pathological condition of the tissues may be such that it is impossible to take care of every raw spot satisfactorily, and every point to which a secondary adhesion might form, and therefore impossible to promise entire relief. In these difficult cases the patient is sometimes lucky if she escapes with her life, even if it does entail some suffering days for her. Every surgeon has no doubt had to open the abdomen again for nothing more than the relief of pain resulting from post-operative adhesions following a difficult operation. It is always interesting to study these adhesions and follow out their locations. They will nearly always be found to be so attached that there is a pull on some part of the parietal peritoneum, such as adhesions of the omentum to the peritoneal incision, or adhesions to the stump of the appendix, or to the cecum, or to the stump of the removed ovary or to the broad ligament. The same thing explains the dire suffering of appendiceal colic when inflammatory adhesions have fixed its tip to surrounding structures.

Observations of the conditions inside of the abdomen when a second operation has been necessary have convinced me," says

\*Read at the 142 Annual Meeting of the Medical Society of New Jersey, June 19, 1908.

Tinker, "that a large proportion of the cases of chronic constipation and flatulence in patients who have undergone abdominal operations is due to adhesions, and not to intestinal paresis, the condition usually assigned as the cause in these cases." To my mind it is a matter of just as much importance to restore the health, comfort and well being of a patient as it is to do a most perfect operation as regards mechanical skill and technic. The patient and her future welfare sometimes are forgotten by the surgeon in his intentness on removing the pathological structures. Oftentimes the very way the contents of that abdomen are handled by him means happiness and health for the patient in the years to come, or torture and pain and advice to all her friends not to have an operation under any circumstances because one is never well afterwards. It is easy to see how much harm this may lead to.

I want to point out how some of these painful and persistent symptoms following operations may be prevented and the health and comfort of the patient may be conserved. Most surgeons at the present day agree that the bowels should be handled as little as possible and as gently as possible. If necessary in an extremity to bring them outside of the abdominal cavity they should always be protected with compresses moistened with hot salt solution. The use of solutions in the abdominal cavity is also in a majority of cases condemned, especially solutions of antiseptics, adrenalin, and other drugs; and the tendency of abdominal surgery is towards a dry toilet rather than a wet one. Every effort must be made to eliminate the possibility of the formation of post-operative adhesions if we are to attain the results for the patient we look for. The perfect arrest of hemorrhage and the removal of all clots must be done carefully. Every clot left behind may become an organized adhesion or the focus of an infection if the operation has not been a perfectly clean one. The crushing of large masses of tissue by heavy angiotribes, devitalizing large areas of tissue means that adhesions will form and peritoneal tissues be put upon the stretch. The same may be said of the application of ligatures *en masse* in the treatment of stumps.

Much harm is undoubtedly done by the rough handling of retractors in the incision bruising the delicate peritoneum. Sometimes it is the faulty shape of the retractor, particularly those forms with a bent tip on the end of the blade. Sometimes it is due

to the forcible efforts on the part of the assistant to keep the incision wide open when the patient is not fully relaxed with the anesthetic. No good abdominal surgery can be done unless the abdominal muscles are thoroughly relaxed and pliable and should not be attempted unless such is the case. I would rather make my incision twice as long than to have it too forcibly stretched with retractors on account of its being too short. Make a few autopsies on some of the patients you lose and when the incision is opened up you will often be surprised to find extensive extravasations of blood, and bruising of the peritoneum for one or two inches to either side of the incision, showing the all but brutal roughness of the hand that handled the retractor. Such a bruise of the delicate peritoneum and the local irritation and exudation following is quite sufficient to produce adhesions to the adjacent bowel or omentum, and such a parietal adhesion is quite sufficient to bring about a wave of agony at every peristaltic movement of the bowel, exhausting the patient and making her life a burden of long-drawn out misery because of the lack of the simple but rare virtue of gentleness in the operator.

The careful covering of all raw surfaces in the abdomen left by the separation of adhesions during the operation for the removal of pathological tissues is most important but not always most carefully practiced. If the broad ligament after the removal of tubes and ovaries be not carefully stitched together, or its two layers brought neatly together after a hysterectomy, we may expect adhesions to form where the surfaces are left exposed. The broad ligament is parietal peritoneum and in the light of Lennander's experiments we may expect to have pain from the stretching of it. If the surgeon omits to cover over the stump of the ovary and adhesions form to it, may not the pain and discomfort after a pathological ovary has been removed be quite as great as before? Patients usually measure the gravity of their diseases by the amount of pain they suffer and their cure by its relief. Now if the abdomen be opened for the removal of a small ovarian cyst or a backward displacement of the uterus, neither of which are dangerous enough to threaten life, and the patient be left with abdominal pain and suffering due to a lot of adhesions from poor surgical technic, adhesions which produce pain as bad or worse than the original condition did,



then from the standpoint of the patient, what has she gained? She suffers as much and she is as badly off as before the operation. If it has not given her relief; and it is only human nature for her to feel that the operation has done her no good. No operation should be considered successful if the patient is left with more or less pain, constipation, indigestion or other disturbances as the result of adhesions which might have been prevented by more gentleness and careful, painstaking attention to details.

I shall not burden you with prosaic case reports in illustration of what I have said. Look over your records and you will find somewhere in your file cases in which you were surprised to find persistent, agonizing pain for months or years after an operation that was clean and uncomplicated. This will be so especially in your earlier experience. My only apology in bringing this subject to your notice is to draw attention to some of these details of technic which make for the well being and comfort of the patient, and which by their observance make a successful result, or by their neglect a failure to relieve the symptoms and cure the patient. Also to emphasize to those who do abdominal surgery the importance of using every effort to protect the parietal peritoneum from the formation of adhesions which may drag on it or its mesenteric folds.

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#### DISCUSSION.

**Dr. Elsmore Stites, Bridgeton,** said that in considering the question of pain, one is met at the outset with the difficulty of personal equation. In estimating the intensity of pain or its diagnostic value, one must remember that its reaction varies almost indefinitely in different individuals. There are no rules to guide one in judging whether the intensity of the pain warrants the outward manifestations of suffering or is sufficient to effect the apparent disability, or whether it is due to a nervous system so much reduced below the normal as to cause it to react to a very slight stimulus. These remarks, he said, apply particularly to women. In discussing the causes of post-operative pain, it seemed to him that several questions should be taken into consideration: whether the pain is a continuation of a previously existing one, or is an entirely new symptom developed post-operative. He thought that its character should likewise be considered, and also its location, together with the absence or presence of fever. This would apply to pain generally and to post-operative pain.

Dr. Stites said that he had in mind a case that had come under his observation in 1890, a most

exaggerated form of neurotic pain, which was operated on by a most eminent Philadelphia surgeon. The pain continued, except more severe, until the fall of 1891, when the same surgeon reopened the abdomen to break up supposed adhesions. The result was not satisfactory, the pain continuing in an even more exaggerated form than that resulting from the previous operation. This pain persisted for another year, and in the fall of 1892, the same surgeon attempted the third time to relieve the suffering by breaking up the adhesive processes. The result was the same, save a still greater exaggeration of the pain than in the two previous operations. The woman lived for ten years after this—the most miserable, pain-racked and bed-ridden existence that one could imagine; and she died a morphia habitue, taking enormous doses to keep her within bounds of comfort.

This case led Dr. Stites to say that he believed that too often surgeons are persuaded to attempt to relieve conditions that are entirely due to nerve-exhaustion by operative procedures. The stimulus of an operation added to the already unstable nerve centers, cannot help but awaken many reflexes. The pain resulting is varied, governed, of course, somewhat largely by the psychic disturbance of the patient in question. Severe pain of any other than the neurotic form seldom presents itself as the sole symptom; and it seemed to Dr. Stites that when other symptoms are wanting, operation for the relief of pain should not be undertaken.

He said that before he could agree with the author he would like a more satisfactory explanation as to the lack of pain attending hysterorrhaphy done by scarifying the anterior surface of the uterus for the purpose of securing that always much to be desired parietal form of peritoneal adhesion.

**Dr. Darnall,** in closing, said that he had nothing further to add. Of course, he remarked, we all appreciate that pain is too big a subject to thoroughly cover in a short paper. It would take too long to go thoroughly into even a single group of its causes. The subject of pain takes in the whole field of medicine and surgery. The pain of neurotic origin is in itself a very wide field, particularly that associated with hysteria and that in morphine habitues. His feeling in regard to the question asked by Dr. Stites was that patients that have had ventral suspensions almost always do have some pain for some months after the operation. Having done a large number of ventral suspensions, he had found that most of these patients had subsequent pain for a time which gradually disappeared in many of them.

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**Dr. E. J. Ill, Newark,** said that his experience had been that such operations never produce pain unless they displace an organ into an abnormal position so as to impair its mobility. He was about to make a report of five hundred cases of fixation of the uterus by means of the round ligaments, and only in about one-half of one per cent. was there any pain. In one or two of the cases in which pain followed the operation, it

had been found that the tube had been slightly drawn into the wound. To reopen the abdomen for the purpose of breaking up adhesions in order to relieve pain, he said, is a fallacy; because adhesions, as such, never produce pain. He had just operated for an ovarian tumor in a woman treated twenty-five years ago for a severe appendicitis. Some adhesions were left but no pain.

Any one that opens the abdomen to relieve pain from adhesions, said Dr. Ill, will fail. These patients go from one surgeon to another, and are never relieved.

**Dr. F. D. Gray, Jersey City,** said that when it comes to the matter of reopening the abdomen for the purpose of relieving pain believed to be due to adhesions, he thought that new ones were likely to be produced or the old ones to return, just as the adhesions had been formed in the first place.

### OBSERVATIONS ON BRONCHIAL ASTHMA.\*

**By J. Hervey Buchanan, M. D., North Plainfield, N. J.**

The very enterprising chairman of your Committee on Scientific Work, Dr. E. J. Marsh, in a circular letter early in the year, called upon the various county Societies to send to this meeting some of their younger professional brethren with papers on some scientific phase of our professional art. I think it is rather an innovation so to do—an innovation that has much to commend it, however, and one that evidently my own Society, the County Society of Somerset, approved, for the proposition of Dr. Marsh was unanimously accepted; and with a oneness of motive that looked almost like conspiracy, the fulfillment was laid upon me.

I am not insensible, Mr. President, to the high honor, the privilege, and alas! the responsibilities that my acceptance entailed. Yet I cannot but feel as I imagine the old Southern darkey felt when a passing white man asked him to change a ten-dollar bill, for, doffing his hat reverently at the thought of such imputed worth, he replied: "I t'anks you, boss, for de compliment, but I'ze afeerd I hazen't got de change." So, if in exchange for the very clean bill of courtesy extended me you receive some rather ancient and time-worm currency, you will at least understand that it is teh best I have to offer at present.

The theme I have chosen for my paper is one suggested by a typical case of a

rather common and more commonly mis-treated malady that came to my office some time in December for examination and treatment. I refer to a true bronchial asthma, arising in this case from a post-nasal catarrh. And as I went over my little patient, for he was only twelve years old, my mind went back to my own boyhood days and the long winters of personal suffering from the same conditions, the faithful attention of our family physician, whom I honor and respect, the quarts of medicine taken to relieve the dyspnoea, the nights of labored breathing and strangling, and the days of persistent hacking cough, with its distressing tickle in the throat, and scant relief in expectoration, and finally the sudden cessation of it all and prompt relief through one application to my throat by Dr. Carl Seiler, of Philadelphia. And I put an astringent application on this boy's throat, and as his breathing grew deeper and the hacking cough began to cease, my mind again went back to the relief I had myself experienced some twenty-five years ago, and I thought: Here is a subject upon which little has been written, and yet one that offers opportunities for professional triumphs fully as great as any advance in surgery, if we take the amount of suffering relieved as the basis of comparison. And it may not be amiss in the little time before us to consider the subject of bronchial asthma so-called, and to refresh our memories with perhaps wearisome details as to its pathology, its genesis, its study, and lastly a few thoughts on its therapeutic demands.

When I use the word Asthma I do not mean it in the broader sense of dyspnoea, for while all asthma may be dyspnoea, yet not all dyspnoea is asthma in the strict and restricted sense of that word. Yet how commonly we see cases of dyspnoea due to mechanical errors in the action of the heart or some chronic obstructive lesion of the other viscera spoken of as an asthma, and, I am afraid, treated only too often without excuse by strong anti-asthmatic drugs, when only a little thought and care would have shown the error and given more or less permanent relief. But I do, in what I shall offer, refer to that frightful condition of paroxysmal suffocating coming oftentimes without warning, sometimes with only too much warning, and making the life of one so afflicted a torment that only he who has endured it can describe. What, then, is bronchial asthma?

In answer to this, pathology shows us in

\*Read at the 142n Annual Meeting of the Medical Society of New Jersey, June 19, 1908.



the cadaver little or nothing of a specific type. A catarrhal bronchial membrane, and in severe cases the alterative changes of emphysema and other secondary conditions. But these are not specially distinctive and occur in other conditions that in life were not attended by asthma. So that we are forced to consider it as a disease of strictly functional nature, and this view finds its proof, not only in the study of the symptoms during an attack, but in a study as well of drugs employed, and the complete cures often seen. Cures which are cures, with all the urgent symptoms abated, with the breathing again free and unobstructed, and what is more to the point, a return to normal of the parts involved as far as can be determined. It would be useless to attempt to discuss the experiments made and the ingenious tests devised to throw light on the phenomena that occur during a paroxysm. None of these, save as they clear up and render more intelligible, the complex and wonderful way in which the human body is correlated in all its parts, have shed any more light on the disease than has been shed by careful, thoughtful study directed to the signs of the disease itself.

That the disease is a neurosis I believe to be beyond all question an established fact. That this neurosis is of a reflex type I believe, in an overwhelming majority of cases, to be a fact, proved beyond all question by the results of therapeutic measures. From which premises I must, in passing, adduce a logical conclusion, namely: that if more thorough search were made for the exciting cause in such reflexes and that cause abated, the percentage of asthmatic cures would be higher. Which statement stands as a reproach to you and me, if we do not exhaust every means and avenue to find such a cause and eradicate it to our patient's relief. And this nervous basis underlies all the theories of asthmatic causation that I have been able to find. These theories are numerous and all of them have more or less sound reasoning in them, and from them I choose the three most commonly used in descriptions of the disease.

Thus we have the theory that the attacks are due to a spasm of the intrinsic muscles of the bronchial walls. Second, that the attacks are due to a sudden congestion, a "bronchial blush," as it were, of the bronchial mucosa; a swelling of the membrane itself, due to changes in the amount of blood contained within the vessel walls. A condition, in short, analogous to that which obtains in the nasal mucosa in attacks of

hay fever, so-called. Third, that it is a special form of inflammation of the smaller bronchi with a perversion of normal secretions as a result. And examination of the so-called Curschman's Spirals and the perles of Laenac seem to give this theory weight. And so I might go on stating theories, but all of them, just as these three, which have undoubtedly sound basis for their promulgation—all of them, I say, reduce to the last element of nervous action and are based upon some perversion of the nerve activity from that which normally obtains. And, indeed, far from criticising any of these theories, I do believe that the true theory of asthma is found in their combination rather than in the special action of any one set of structures entering into the bronchial tract.

And having come thus far let us go a step farther and see what light anatomy may give us. And right at the start we strike one of the most important systems of the human body, nay, the all-important regulator of all vital action—the great sympathetic system of nerves, upon whose delicate balancing depend all the vital phenomena of the body, and even the very existence of life itself. You and I can go back in memory to our college days, when our professor of anatomy gave a few scant demonstrations of the same system and the professor of physiology grudgingly spoke of the automatic ganglia and passed on. It is interesting to note the difference now, when the anatomical professor gives it more time and the physiologists are scrapping over terminology for the amazingly complex reactions that are being daily discovered and studied within its domain. The great and all powerful regulator of all functional processes, whether it be secretion, vaso-motor changes, peristalsis, yes, even the rhythm and beat of the heart itself, is this same sympathetic system,—and bronchial asthma is a functional derangement. And it is this same sympathetic system that furnishes to the lungs and bronchial structures their innervation, whether it be through the vagi, the vaso-motor system, the trophic nerves so-called, or systems yet unnamed or undiscovered. And it is this same sympathetic system that ramifies everywhere throughout the body and connects through the fibers, directly or indirectly, every tissue more or less intimately. Now the proper working of this great system of nerves, physiologists tell us is dependent upon a most complicated series of influences. The afferent influences, so far as they know, are

legion; the pressure of the blood in the vessel walls, the presence of chemic elements in the blood, the pressure or contact of irritative substances or gases upon areas made receptive of influence by the afferent fibres contained in them, and so on, all are necessary to regulate the phenomena that occur automatically. And, conversely, if these stimuli be altered, so are the corresponding functions with which they are linked, altered and impaired. And these statements you know to be true and proven in your observation in such phenomena as pallor, fainting, vomiting, colics and the like. And equally true is it that bronchial asthma is a reflex, a spasm, if you choose, depending upon many exciting causes, which statement your own experiences will verify.

It would not be seemly in me to go at any length into the diagnostic points of a disease so easily recognized as this, and yet I do want to impress one fact in diagnosis as I pass on. And that is the only too common diagnosis of all dyspnoea as asthma, with a resultant formulation of an improper treatment of the case. Snap diagnoses have no place in scientific medicine. I read not long ago an article by a prominent physician detailing somewhat the way a physician could diagnose a case at sight, and evidently the article was intended to impress the lay reader with a sense of the physician's greatness in particular, and his fellow medical practitioners in general. It was an interesting article and had some very truthful things in it. A physician can and ought to cultivate a clear, discerning observation, and by so doing he can learn much. But let me tell you that a physician who thinks he knows it all at a glance, and doesn't verify his ideas to their own establishment, is a fool—and that is all there is to it. Unfortunate, it is true that bronchial asthma is a disease that admits of a spectacular diagnosis of the snap variety that is very alluring to the impressionistic practitioner, but it is also true that no diagnosis of asthma is complete, or at least should not be so regarded, that does not include a cause proven as such by positive or exclusive evidence. For it is true in the medical world as it is everywhere else, that there is no effect without a cause operating somewhere. You may not always find it, but the longer you search for it the more nearly accurate will be your determination of the conditions present and your better fitting for their treatment. And believe me there are many cases of asthma

in which your search for a cause will cover an amount of anatomy varying from two to six feet, according to the stature of your patient. And if after such a study as thoroughly carried out as your ability will permit, you set a given case down as "idiopathic," then am I forced to conclude that "idiopathic" means "stuck," for there must be a cause somewhere. Don't misunderstand me. There are many cases of so-called idiopathic asthma suffering to-day, in which every opportunity of search has been exhausted in an earnest endeavor to afford relief. Alas! it is only too true that there are many cases of hopeless asthma in which the cause is known, but beyond any cure as yet discovered, and which are doomed to a bitter existence, mitigated somewhat by palliative drugs.

But if the recognition of the disease be easy, let me tell you that to find the cause is sometimes a far different matter. How, then, will you go about it? Let us suppose for a moment that a stranger has floated into your office—and it is my experience that a very large percentage of asthmatics are floaters. You have given him a careful physical examination, sufficient to satisfy yourself that it is a true bronchial asthma with which you are dealing, and then remains the diagnosis of the cause. To ascertain this, the family history should be brought out. Does the history show asthma in preceding generations? If so, don't dismiss your inquiry at that point and supinely accept it as an hereditary condition and therefore hopeless. Your grandfather and father may have passed a hammer toe down to you in direct physical inheritance, but even so it doesn't follow that you must suffer from a hammer toe that can be removed. Look for a history of nerve failings in the family on both sides, and more especially for that hereditary type of metabolism which causes lithaemia with its abundant catarrhal exhibitions. In short, learn all you can of the family type of the patient before you, and bear it in mind as you pass to the personal history of the case. Interrogate him as to his youth before puberty, what sicknesses he had and what sequellæ followed them; his health in particular as a young man and the environment in which he grew up; particularly—and here you strike a vital spot in the matter, has he been subject to any catarrhal conditions, and if so, how, and how long, and if possible, from what cause. Look into his occupation. Does he work in dust, flour, pungent odors, or stale



gases all day? Does he work in the absorbable metals, as lead, arsenic or mercury? Does he live in a house heated by over-dry or over-moist air, or sleep in rooms papered with cheap, scaly paper? Does he over-eat or go to excess in any way? In short, search for every source of irritation to mucous membranes, whether it be derived from without by inhalation or ingestion, or from within from a blood overloaded with the by-products of bodily metabolism not properly eliminated, or too irritating for normal excretion? You can't ask too much and you can't learn too much, even though such questions and knowledge produce little of vital importance. And yet, nine times out of ten, such thorough search in family and personal history will point directly to the cause for you to verify and rectify. And this leads directly to the physical examination which should be begun, bearing in mind two vital points: First, that you are searching for a local irritation somewhere; and that, secondly and logically, both anatomy and physiology point to the likelihood of irritation occurring most frequently in the respiratory tract, then the alimentary canal and finally the genito-urinary sequence. And this is, furthermore, in my experience at least, borne out in practice.

I believe firmly that the greater part of our asthmatics are created by nasal and post-nasal conditions. And it certainly stands to reason that of all the spots in the body that have to constantly adjust themselves to continually changing conditions, the mucosa of nose and naso-pharynx stand easily chief. For every breath is different from every other breath in its temperature, its moisture, its specific gravity, and its dust and odorous constituents. And every one of these factors has some bearing on the generation of local irritations, especially if the membranes be over-burdened already by what, for want of a better term, I shall call lithaemic exudate. And I may add, in passing, that in my experience the two spots most likely to be affected and the cause of the bronchial reflex are the two areas of the naso-pharyngeal wall lying respectively opposite the posterior nares and receiving the direct impact of the inspired air. Let me illustrate: Four years ago, one of my neighbors, a fat, florid man and a heavy over-eater, started down the street and I passed him on my way home. He was laboring for breath, hawking and straining to expectorate and had to lean up against about every other tree for a rest.

I advised him jocularly, for I was not his physician, to go see his doctor. A little later he came in, and after a careful examination, I made up my mind that the trouble lay in those two areas I have mentioned. And I passed up each nostril a thin probe, carrying a pledget of cotton with an astringent balsamic solution on it and allowed it to remain a moment in contact with the membrane. The effect was immediate. Not only did the hack and strain stop, but the catarrhal drip stopped and as soon as the loose mucus in the bronchial tubes was expectorated the asthma left. Once only since then has it threatened to return and then a second application nipped it in the bud.

Again I may cite the case of a young machinist in my practice who suffered for years from attacks arising from a post-nasal catarrh who had taken no end of nostrums and legitimate anti-asthmatic preparations without other than temporary relief. Here again an application made to these two areas through the nostrils, and this time of glycerite of tannin, gave prompt relief, though I had to repeat the application several times before the trouble left entirely. And did time permit I could cite several such cases. So, too, you may find sensitive areas on the turbinate, sub-turbinate areas or septum that are the starting points of the trouble. So, too, inflammations of the accessory sinuses are active but obscure causes of the trouble. Thus I quote a case under the care of Dr. F. C. Ard of Painfield, where the history and symptoms pointed to a post-nasal catarrh as the causal element and yet treatment of the catarrh failed to influence the asthma as would have been expected, and not until one of the spheroid cells was opened and cured for a purulent condition did the asthma leave. So too malformations as spurs, exostoses, traumatic deviations, etc., become active agents in producing the irritations that engender the paroxysms. Foreign growths are a frequent cause. Thus I cite the case of an elderly German lady in my care who suffers more or less constantly with asthma due to soft polyps in both nostrils. I have snared out some fifty or sixty, and each removal gives her relief for a time, not complete nor permanent, for the polyps spring up again at once, and the bones from which they spring are so diseased that I believe no cure is possible, and I do not think should be attempted. For I tell you, there is such a thing sometimes as too much cure.

Thus I cite another elderly woman in my practice who for years has been a sufferer from asthma and who has literally suffered many things of many physicians. A nose and throat specialist in an adjoining city diagnosed it as due to catarrhal troubles and proceeded to remove the turbinates, some pharyngeal excrescences, and pretty much everything in sight that stood up enough to take a snare or saw; and she got better at once. Of course she did, but when the turgescence of the operations subsided and cicatrization set in, with its scars and contractures, and her nasal passages became practically dry tubes, throwing the whole volume of inspired air almost unmodified directly against the membranes beyond, her asthma returned, and I tell you frankly her last estate was worse than her first. So, too, adenoids are a not impossible cause. Thus I cite the case of a child less than a year old, the son of a brother practitioner, who began to choke up at night with attacks his father described as croupy, and to wheeze and rattle and cough all day. My first examination gave me the impression that the child's bronchial tract was over-stimulated by expectorant medication. Discontinuance of this, however, gave no relief, and a more careful study convinced me that the child had a bronchial asthma with attendant bronchitis originating in adenoid growths. I referred the case to Dr. Ard for removal of the growths, which he kindly and skilfully did; the child in two days was absolutely well, nor has there been any return as yet of the reflex condition. And so, did time permit, I could call your attention to phase after phase of conditions in the nose and throat that have been proven beyond a doubt the causative element in bronchial asthma. And in the same manner the various forms of pneumoconiosis may give rise to asthmatic conditions, and I do believe that a large percentage of the so-called idiopathic cases have their origin in just such a cause as this, which, save in presumptive evidence, offers little or nothing of positive demonstration.

Of asthma arising from stomach conditions I can say nothing from personal observation, and the same is true of causes operating in the genital tract. Of the digestive tract beyond the stomach, however, I have an interesting case to relate—briefly this: An engineer of a western express running up through Nebraska, and exposed to irregular hours, irregular eating, and a host of trying conditions. Suddenly asthma

developed. His local physicians failing to control it, he tried changes of climate, sanatoriums, and treatments galore without any relief. Came east and under my care seven or eight years ago. I went over him time and again and could find no probable cause other than a lot of bleeding piles. I suggested their removal but he refused until while away on a visit another physician expressed the same opinion and removed them without any benefit whatever. He came back and I again began to study him, and after a while I found the cause in a slowly developing catarrh of the colon, which passed surely into a membranous colitis of stubborn type and resisting all curative attempts. To-day he is a hopeless asthmatic, and I regret to say an opium fiend, but often he passes long, tube-shaped membranes, and with their evacuation, comes a respite from the asthma. He is, I believe, a hopeless case, save as morphine mitigates his sufferings somewhat. And, finally, in this connection, hemorrhoids may be mentioned as an occasional cause of the disease. One such case I have seen where removal of the hemorrhoids was followed by almost complete relief and that permanently.

Of other causes I shall take no time to consider, yet as I pen this there comes to my mind the peculiar case of a young lawyer of my acquaintance who suffers with asthma, but whose attacks always abate on the appearance on the body somewhere of an eczematous rash, and reappear on its subsidence. And this phenomenon is too constant to ascribe it to chance. It suggests very strongly the idea of the old practitioners, that suppression or "drying up" of a baby's eczema, meant the development of lung trouble in the child. I suggested to him one day that the excitation of a body rash by some mechanical means, such as a curry comb, might be a valuable therapeutic measure in his case, but the suggestion was not kindly received and I found myself suddenly adorned with a lot of titles to which I never seriously aspired, coupled with some hints as to ancestry which I am satisfied are erroneous!

But leaving the disease aside, how shall we treat it? And on this phase I have little specifically to offer. Two drugs seem in some cases to exert a specific effect, and these are iodine and arsenic. How they act I do not know, but that they are of value I have proven more than once. I have a patient—an old man, who every fall gets his periodical attacks of asthma, apparently



from some atmospheric influences, and who regularly takes his K. I. with prompt relief. Fortunately, the list of drugs and measures that we can employ to give relief to the intense distress of the asthmatic paroxysms is large and fairly satisfactory. What they are and how to employ them, you know full well, and for me to discuss such measures before you would be unseemly. Yet to use such means of relief year in and year out, as the sole expression of all attempts at treatment, it seems to me is both a reflection on the physician and a betrayal of the trust reposed in him by those who seek his aid. Palliative measures must be used at times, of course, but the true treatment of bronchial asthma lies in discovering the causative element and treating it, rather than annulling the results which that causative agent has produced. For it is true in the treatment of bronchial asthma, as it is true of every other form of disease, that to effect a cure the causative element must be eradicated. And more than this can no man say.

## THE THERAPEUTIC APPLICATION OF DRY HOT AIR.\*

By **Elton C. Corson, M. D.,**  
**Bridgeton, N. J.**

My object in presenting this paper is not to adduce any new facts or methods, but rather to stimulate the scientific use of a valuable remedial measure, which alone may cure, or in combination with other remedies accomplish what neither singly may do. It is an adjuvant that should be applicable by any physician, or available should he desire it.

The observations herein stated are based on the treatment of more than one hundred cases.

The use of dry hot air in curing disease has existed from time immemorial. Only within recent years has its use been placed on a scientific basis and the apparatus for applying it made purchasable by every doctor.

It may be given locally, embracing one part, or bodily in a recumbent position, including every part except the head. The parts to be treated should be properly wrapped to prevent burning, as in some instances the temperature rises to 475 de-

grees F. The wrappings conduct the hot moisture away rapidly and keep a layer of dryer air between the wrappings and the limb. Burns occasionally occur, but yield readily to the ordinary treatment of such lesions. They frequently have a derivative action like fly blisters or cupping.

The local application produces marked physiological changes. There is intense hyperæmia. This seems to be an active rather than a stasis condition. The vasomotor dilatation removes the pressure from the nerve filaments, relieving the pain. The intense heat has also an obtunding effect. The edema and hyperplastic tissue is absorbed, new and healthy tissue takes its place. There is profuse sweating, which in the case of bursae and lesions with poor circulations, causes local depletion. The body is at once more mobile. There is a rise in the local temperature.

In the body applications, a feeling of languor at first ensues. The pulse and respiration quicken. The body temperature rises one or more degrees. Profuse perspiration takes place, and the pain and distress are at once removed. There is thirst. In some cases a gallon of water was drank during the treatment. The kidneys are stimulated and, at times, a quart of urine was excreted. At times hunger is incited and the patient asks for food. At times sleep is engendered and several hours' sleep is indulged in.

If profuse perspiration does not set in or the heat be lowered, the head feels full, respiration and cardiac action are interfered with. The patient grows restless and asks to be removed from the machine. Nausea sometimes occurs. These distressing conditions may be readily controlled, as the patient may be easily removed from the apparatus or the heat lowered. The use of cold cloths, or cold water bags, or the electric fan lessen the possibilities of their occurrence and render the patient comfortable. These untoward manifestations would naturally suggest contraindications to the body treatment. High arterial tension, arterial-sclerosis, valvular disease and cardiac neurosis, old apoplectics and menstruation. These complications have all been met and only temporary disturbance resulted. In a few cases where the injury to the nerves had rendered the parts anaesthetic, severer burns than usual resulted.

Sprains, sprain-fractures and contusions were treated as soon as the patient could be brought to the office or the apparatus taken to the house. The intense pains were re-

\*Read at the 142d annual meeting of the Medical Society of New Jersey, Cape May, June 20, 1908.

lieved quicker than by the local application of anodynes, and without the disturbing effect of their systematic use. Frequently after the heat had reached 250 degrees F. the pain would entirely subside. The edema and stiffness yielded in about half the time as under the usual methods. In chronic cases, with myalgias and stiffness after the splints were removed, the obtunding and relaxing effects of the heat made it possible to begin active manipulation at once. In fact, in some cases, massage was used from the beginning and stiffness never occurred. The part with splint attached was treated in the apparatus.

Myalgias and neuralgias of all types were benefited, either by this treatment alone or in combination with massage and electricity. Lumbago, incapacitating the patients from performing their duties, was relieved and cured in from one to three treatments. Neuritis of the musculo-spiral nerve that had proved intractable to medical treatment, yielded readily to hot air and electricity. Acute inflammatory rheumatism was greatly benefited and the attack cut short about one half the regular period. In many cases only three treatments were required over a period of seven days. Chronic rheumatism was greatly benefited, some during the treatment and a few hours after, others permanently, while in others relapses occurred without any apparent benefit.

Arthritis deformans at first seemed to be entirely tractable to this form of treatment. Patients who had to be carried into the office walked out with pains and stiffness removed. Relapses occurred after several treatments, and the patients were induced to try other treatment with less benefit in every case. The nervous phenomena of acute alcoholism were readily allayed. The large amount of water ingested diluted the toxic material which was profusely eliminated through the skin and kidneys. The patients were enabled to sleep well and resume work the following day.

Lithæmic cases with hyperæsthesias, paræsthesias and various perversions of sensation were benefited in some cases, and when followed by massage, vibratory treatment or electricity, responded more readily than without the hot air treatment. In cases with melancholic symptoms the treatment and apparatus had a beneficial mental effect. Gonorrheal rheumatism in some cases was much benefited. Relapses occurred, but, on the whole, recovery was accelerated. In syphilitic cases, the profuse

sweating caused the syphilides to disappear more rapidly and the general tone of the system was improved.

A case of traumatic retinitis was markedly benefited. The patient, a neurasthenic, and suffering from periodical attacks of migraine, was hit in the eye with a snowball. The specialist advised a course of pilocarpin sweats, I used the hot air apparatus instead. The increased metabolism resulted in improved appetite; increase in weight; disappearance of the attacks of migraine temporarily, and the restoration of the eye to as great an acuity of vision as was anticipated from the use of pilocarpin, and without its depressing effect.

Boils and infected wounds were greatly benefited. Three boils on the back of my own neck were causing great suffering. Three quarters of an hour's hot air treatment at 350 degrees F. relieved the pain so that I had a good night's rest. Infected wounds of hand and fingers were relieved of pain, and the virulence of the infection lessened with marked increase of healing activity. The uncomfortable syndromes of influenza were greatly alleviated, and in some cases the attacks aborted.

There is a general belief among doctors and the laity that subjecting the body to such high temperatures, with its attending perspiration and possible depression, would render the patient more easily susceptible to taking cold. I never had such an experience with *any* of my patients. They were allowed to thoroughly react, after which they were given tempered shower baths, then salt or alcohol rubs. In some cases massage, in others vibratory treatments, were given. There are some economical objections to the outfit. An additional room is required for the body outfit. For the arm and leg apparatus this does not hold, as a corner of the consulting room is all that is needed. One must discontinue consultations, however, in such cases.

All practitioners have not the desire to do such work, and in some cases no time. An application of massage or electricity in connection with the hot air often cures where it alone would not avail. Notwithstanding the benefits a knowledge and use of these modalities confer, I am sure, that so far as sprains, sprain-fractures and contusions are concerned, the use of this agent with rubbing only will amply repay any doctor for the additional efforts he may make. The body treatment has a decided advantage over the Turkish bath in that it



may be made available in every place. The patient is not obliged to breathe the hot moisture, and the complications are more readily controlled.

### THE RELATIVE IMPORTANCE OF THE FITTING OF GLASSES IN OPHTHALMIC PRACTICE.\*

By Linn Emerson, M. D., Orange, N. J.

The reproach of specialism is that it too often finds disease in the organ examined. For this reason it is important that the specialist in any department of medical practice should be recruited from the ranks of the general practitioner.

He should have a good general knowledge of medicine and not permit his interest in general medicine to become abated. It is most unfortunate that the intimate relations existing between the general health and proper ocular function is not more fully appreciated not only by the general public but by the medical profession. More than half the population of the United States have need of glasses. Many of them need glasses as much as they need shoes, and of the millions who are wearing glasses only 5 or 10 per cent. have *proper* glasses.

The causes of this condition of affairs are manifold, but the principal cause is ignorance, and the medical profession is in a considerable measure responsible for the ignorance of the general public. To the individual of average intelligence the need of glasses is indicated only in cases of defective eyesight and the necessity of the correction of errors of refraction for the relief of *eyestrain* is only just beginning to be appreciated.

To the general public the doctrine of eyestrain is being preached most emphatically by the advertising refracting optician. The medical profession as a whole seems to be apathetic on this important subject. Not only the general practitioner is slow to recognize the etiological factor of eyestrain in cases of headache, migraine, biliousness, nausea, indigestion, etc., etc., but many of the so-called leading ophthalmic surgeons fail to attach sufficient importance to this branch of their work.

At the 1906 meeting of the American Ophthalmological Society a paper by Dr. G. M. Gould showed that in thirty years but 1 per

cent. of the total number of papers presented to the society dealt with this subject. His paper was so coldly received that the publication committee did not see fit to recommend its publication in the transactions of the society.

In the ophthalmic year book of the Practical Medicine Series for 1908, just published, despite the work that is being done and the papers that are appearing from all parts of the country not a single word appears on the subjects of refraction or eye muscles. Has the last word been said on this subject? Far from it! Refraction and muscle work is the thirty-third degree of ophthalmology, and I blush to say not one ophthalmologist in five is either a careful or competent refractionist.

The specialist of mature years and great reputation, whose waiting room is crowded with patients who are ready and willing to pay a large fee for a three or five minute consultation, often does not care to spend twenty, thirty or forty-five minutes in the careful fitting of a pair of glasses, particularly when the patient does not appreciate the value of the service and expects to pay only the same fee he would pay for a three-minute consultation. Some difficult cases have to be seen five or six times before the final prescription is given, yet most patients would think a fee of twenty-five dollars exorbitant. Nevertheless, I know several expert refractionists who are limiting themselves in the number of their cases and charging adequate fees.

Refraction work is held up to the beginner as the drudgery of ophthalmic practice and most young specialists are looking forward into the dim and glorious future when their practice shall be made up largely of pathological and operative cases. Since the refraction work is to be ephemeral, why trouble oneself to become an expert?

In nearly all post-graduate and special hospitals the refracting room is almost deserted by the internes and post-graduate students who crowd the clinics and operating rooms that they may become familiar with pathological and surgical cases. As a result of this the young specialist often goes out well equipped to perform cataract and other important eye operations (which do not come to him on account of his lack in years) but not well equipped to do that work which will bring him at least three-quarters of his income during the first ten years he engages in ophthalmic practice, namely, refraction.

The fitting of glasses requires time, pa-

\*Read before the Morris County Medical Society, June 9th, 1908.

tience and much common sense and many men are not temperamentally fitted for this work, and not only are they poor refractionists but they have no desire to be other than poor refractionists. In ophthalmology to-day there is a far greater number of poor refractionists than of poor operators.

A man does best the work he likes best and it does not take patients long to ascertain whom to consult. A morning spent in the office of two eminent ophthalmic surgeons will reveal the fact that the work of one is almost entirely refractive, while that of his colleague contains but little. The reason is obvious.

Patients often ask why the eyes of the present generation are so much poorer than formerly and why so many children now are obliged to wear glasses. The eyes of the present generation are not inferior to those of former times, but are, in fact, better, as witnessed by the fact that the average individual does ten times as much near-work as was done one hundred years ago.

While the mechanism of the human eye is quite wonderful, the perfect eye does not exist and one of the eminent fathers of ophthalmology said that if an optician sent him as imperfect an optical instrument as the human eye he would send it back. While this imperfect eye served primitive man most efficiently the burdens of modern civilization, with long-continued periods of the enforced use of the eyes for near work, make it imperative that the ocular mechanism shall be well nigh perfect. Even in the so-called normal eye its prolonged use for near work results in fatigue and, if hyperopia or astigmatism is present, this fatigue manifests itself in direct proportion to the degree of refractive error.

There is no other muscle in the body from which such prolonged and continued contraction is demanded as from the ciliary muscle. The hyperope who demands this of his ciliary muscle without the use of proper glasses is subjecting himself to as great a strain as though he were to compel one hand to carry a pound weight throughout the entire day.

The failure to correct these errors of refraction is a blot on modern civilization, and what aggravates the evil is the fact that thousands are wearing improperly fitted glasses without relief, and are dumbly plodding along their unhappy ways unaware of the fact that their headaches, sick stomach, giddiness, biliousness, etc., are curable. Of course, most of this hellish fitting is done

by the so-called optician, optometrist, ophthalmotrician, optician, eyesight specialist (and some even have the assurance to call themselves eye specialists), who advertise glasses for \$1 and then charge the poor victim from \$5 to \$15 for a pair of cheap glasses that can be purchased of any reliable optician for from \$1 to \$3. Not a week passes but I see in the clinics patients who have thus been fleeced.

They come to the clinic *because they are poor and cannot afford* to pay the oculist's fee, yet more than half of them have paid more for their worthless window panes than they would have paid had they consulted a reputable oculist—most of whom make reduced charges to poor people—and purchased their glasses of a reliable optician.

Note the immense amount of money these sharks pay for newspaper advertising and their frequent changes of itinerary when the people find them out in a certain locality; they seek greener pastures, and some other one of like ilk comes onto the carpet and the harvest begins anew. Yea, verily! There is a sucker born every minute, but there are two born to catch him.

Not all refracting opticians are dishonest; occasionally one is found of moderate ability, but so are there plenty of druggists who can intelligently prescribe for certain minor ailments, yet who would think of permitting the druggist to practice medicine? The relation of the optician to the medical profession is exactly the same as that of the druggist and no greater privileges should be granted to him.

The cases of glaucoma, optic neuritis, diabetes, cataract, nephritis, etc., that have been injured or killed by meddlesome and ignorant opticians are legion.

Dr. A. Edward Davis in a recent paper cites several cases that have come under his observation and every practicing oculist can recall a like number.

The refracting optician often emphasizes the fact that he uses no drops. Why? Because the use of drops is practicing medicine and they would be legally liable if they used drops. Many of them, however, advertise that they employ retinoscopy, despite the fact that cycloplegia is the *sine qua non* for this procedure.

One of the most successful refracting opticians in New York told an oculist during a discussion of this subject, "I can fit glasses just as well as you can *without* drops, but I would give \$10,000 for the privilege of using drops, and at one time I seriously contemplated studying medicine



with no other object in view but to obtain the privilege of using drops."

No child under fifteen years of age can be properly fitted without the use of drops, and for that reason no optician should be permitted to fit children.

There is no doubt that there are certain cases, such as presbyopia, in which an optician should be permitted to fit, but for him to rush into the public print advertising to cure all the ills to which flesh is heir by glasses is most reprehensible.

There are certain oculists who are not believers in the use of drops for the fitting of glasses. I can only say that I am unable to accurately fit a large number of my cases under thirty-five years of age without the use of a cycloplegic, and observation has taught me that many of those who *think* they can, do not.

The *Medical Record*, in an editorial June 22, 1907, makes a plea for the itinerant oculist, as follows:

"There is an enormous amount of suffering among the rural population of this country, especially the wives and daughters of farmers, due to uncorrected astigmatism and other ocular defects. On first thought one may be inclined to doubt the correctness of this statement, for the farmer is supposed to lead an outdoor life and to be little given to literary pursuits. But this is not true of many, if not the majority, of the rural population. In most farm houses of the better class one will find the weekly political paper and one or more agricultural or poultry journals, and in not a few several of the magazines and weekly story papers are also taken and faithfully read from cover to cover. Moreover, the women have their sewing and their mending and their fancy work—more eyestrain, in fact, than many of their well-to-do and perhaps better educated sisters in the city. Numbers of these poor women are martyrs to headache, gastric disorders, and other ocular reflexes, ignorant for the most part of the cause of their suffering and unable, even if they suspect that their eyes are "weak," to obtain relief. At the best, or worst, they go to the country store and select from a small assortment the spectacles which they think they need, and their last state is perhaps worse than the first. The country doctor is seldom able to help them, for as a rule up-to-date, sensible and skilful practitioner as he is, he lacks the practical training and experience necessary for the correction of errors of refraction, and even if he has the qualifications needed for such work the demands of a country

practice leave him no time for the tedious work of testing eyes.

"Herein lies an opportunity for relieving suffering and attaining material success which is worthy of the consideration of the recent graduate in medicine. Specialists must, from the nature of their restricted practice, live only in the cities and larger towns, where the number of consultations are sufficient to occupy their time and afford them a living practice. But in the case of refractive errors especially, which are still so wrongly regarded as among the minor ills, the farmer and his women folk cannot afford the time and expense of a journey to the city in search of relief. There is need here for missionary effort, and, contrary to the rule of most missionary endeavors, the man who undertakes such a needed work will reap an ample reward. There is an opening in nearly every county of every State in the Union for a thoroughly trained and skilful oculist who will establish a circuit of small towns, in each of which he has an office in which he may be consulted, say, two days a month, or a fortnight, by the country people in the district. The man should be an educated physician, with hospital training—as should be every specialist—and preferably with an experience of several years in general practice, during which time he has devoted his unoccupied hours to a study of the eye and its diseases and of refractive errors and the means of their detection and correction. He should indeed be the equal of any of his fellow-specialists practicing in the city. His way at first may not be easy, for he will be a missionary, and his task will be to educate the people, through their medical advisers, to an appreciation of the rôle of eyestrain in the causation of many of the headaches and "dyspepsias" from which they suffer. He must be tactful in his relations with the practitioners in the towns embraced in his circuit, and should, of course, confine himself strictly to his specialty, and not encroach on the general practice of his colleagues. It will not be long, however, before such an 'itinerant oculist,' if he is skilful, and as honest and tactful as he is skilful, will make his way. One successful case in each town will establish his reputation, for farmers' wives are great gossips, and if he is careful to respect the rights of the local physicians they will be only too pleased to send him their teasing cases and 'chronics' that their medicines have not relieved, and which they will themselves soon learn to recognize as

'eyestrain' cases and gladly refer to the oculist for relief.

"There is nothing unethical in such a practice. Traveling quacks have caused honest physicians and intelligent laymen to regard the 'itinerant' with suspicion, but the origin of all specialism was in quackery, and it was only when reputable practitioners began to devote themselves exclusively to a study of special diseases that the stigma attaching to special practice was removed. There are even now many reputable physicians and specialists who have offices in two or more places in the same city or in different cities, and a slight extension of this principle by educated, earnest, and honest young ophthalmologists will cause the itinerant oculist (not optician) to be regarded as a valued and honorable member of his profession."

Several States have already inaugurated a system of the inspection of the eyes and ears of school children, and I trust the time is not far distant when it will be universal in this country.

Just a short appeal to the general practitioner in closing. As I said at the beginning of my paper, the specialist and enthusiast often overstates his case, but there are some large grains of truth in what I have had to say to you.

Don't treat your cases of headache, migraine, nausea, dizziness, biliousness, insomnia and dyspepsia, indefinitely with drugs. Particularly, the so-called bilious headaches.

Any man who neglects to have the eyes examined in a case of persistent headache is as remiss as though he neglected urinalysis. Furthermore, you owe it to your patients to see that they consult some reputable oculist. The average layman does not know the difference between the reputable physician and the refracting optician.

Hundreds of patients have said to me, "Oh, yes; I went to a good eye specialist; I went to Dr. H, Dr. L, Dr. D or Dr. A," and when informed that those men were just as much doctors as the barber or the dancing master have shown much surprise, saying, "They advertise in the papers, and I supposed they were 'reliable.' Why are they permitted to pose as eye doctors?"

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If one suspects acute cholecystitis and on opening the abdomen does not find the gall bladder enough diseased to warrant further procedure, it is best to anchor the top of the organ by suturing it to the abdominal wall. If further symptoms are manifested, the gall bladder can then be opened without anesthesia and a catheter inserted for drainage.—*Amer. Jour. of Surgery.*

## PRIZE ESSAYS.

### FIRST PRIZE.

#### Feeding During the First and Second Years of Infancy.

By Thomas N. Gray, M. D.,  
East Orange N. J.

In writing on this subject, it would not be necessary to give any space to an argument for breast milk as the only legitimate food for infants during the first year of life, and even longer, if the year ends in the hot summer months, or in the event of tooth eruption, were it not that in the past few years there has been advanced a theory adverse to the nursing art, except for two or three months. Then, too, there has grown up in a certain class of mothers the disposition to put aside the infant, announcing bluntly the determination not to nurse it, and as well the fact, abundantly established, that the power of the breasts to do their work has been failing of late years in a large proportion of women.

Many theories have been advanced to account for this failure on the part of nature. It is undoubtedly due to a combination of causes. Among them are the increasing demands of social life, and environments of this life—both large factors. Larger even than this, I believe, are the present, and for some time past, demands of school life. This demand crowds to the utmost the mental powers of girls, at the time when the physical development should be the most rapid, and they are, as well, going through the transition from girlhood to womanhood—a time when the nervous system should be at its quietest. The opposite is the condition. The onerous studies, entailing a decreased amount of outdoor life, keep the brain working overtime, as well as intensely. This combination of too much indoor life with mental strain, too often plays havoc with the nervous system. This combination will influence badly, physical and functional life, when these have reached perfection; it has its deleterious effect on the boys in the high schools. How much more than either—and how much more quickly and deeply—will it influence the girls, with their more unstable nervous systems, because of the beginning functional activity of uterus and ovaries? And, as well, how much does this disturbance of the nervous system, at this time, interfere with uterine and mammary development? How much have the rushing methods of the edu-



cator during the past decades to do with the inert uteri and useless mammary glands the physician meets with increasingly?

It is the duty of physicians to combat the theory, the disinclination, and the methods of the modern educator, by teaching the fact to mothers that the food in the breasts is there by natural law, keeping its normal composition during the critical time of infantile life, evidently to meet a demand, and is to be abrogated only by unfit physical, or a diseased condition, on the mother's part. In this is included menstruation and pregnancy, when they undoubtedly have a deleterious effect on the milk.

The breasts are not only manufactories of food, but are, as well, sterile, automatic, collapsible reservoirs. Compare this with the nursing bottle! It may be sterilized but it must be handled after doing this, and may possibly be made sterile. Or it may be trusted to a nurse who does not do the work thoroughly. It is not automatic, not collapsible.

Nature's food is sterile, properly warmed, alkaline, suited without manipulation, to the functional activities of the digestive and assimilative organs; its chemical composition perfectly adapted to meet the requirements of the growth and the acquirement of vitality during the period of greatest proportionate increase in size and weight, when the rapid gaining of vitality is essential. Abundant, from all sources, is the evidence of the profession that, do the best you can, the artificially fed child, during the first years of life, does not have the vigor, the robustness, the resistance to and against sickness which the breast-fed has, and that the breast-fed child has a comparative freedom from stomach and intestinal disturbances, as against the comparative frequency of those in the bottle-fed; this because breast food is not only more perfectly digested, but is as well more assimilable than the best we can do with artificial food.

Cow's milk may be modified until it corresponds identically with the chemical composition of a mother's milk, this determined by an analysis of the breast milk as a basis for modifying. Do we know when the first, or second, or any following portion of this modified milk is given that it is going to be perfectly digested and assimilated? Do we not make a visit the next day, and the next, and the next to note results? Have we this anxiety where the child is feeding from the breast of a healthful mother?

Again, we bring in a wet-nurse. Given that she is our selection for suitability, can we guarantee a perfect result with the

child? Do we not often have to experiment in this, as in artificial food, before we get one that is acceptable to the baby, as shown by results? This forces a conclusion, mine, which no one need accept unless convinced of its soundness, that nature has a law of correlation between mother and child, by which each mother's milk is adapted to her own offspring, and each baby's stomach and intestines are adapted to its own mother's milk.

The duty of the physician does not end with pelvic measurements, urinary examinations, attention during labor and through the parturient period. His duty is to the well-being of the child to come, as well as to the mother, and this duty begins with his engagement. He should keep an oversight of the mother, keeping her general health up to the highest degree possible, with a direct view to future lactation. He should teach her that, having become a mother, she should come to her full motherhood as well prepared as it is possible for her to be, for the nourishment of her infant. Too many women in this day do not know the danger to the child of artificial feeding, and the fault lies with the profession in that it does not make it the rule to teach a mother what motherhood means. After the infant has been born it is still the duty of the physician to keep an oversight of the mother, that she may be kept in the best possible condition to meet the requirements of nursing, for quite often could the child, which has been forced to artificial feeding through the lack of nourishment in the mother's milk, have been kept on the breast, had the mother's condition been properly looked after. Then, too, too many mothers, through ignorance, nurse a child too often, or at too long intervals, in the one case causing a thickening of the milk, in the other a thinning, thus disturbing the proper percentage and dilution of the solid elements of the milk, and making in the one instance a milk hard to digest, and in the other a lessening of nutritive value. Quite often is the failure of the infant to show the proper degree of development, or the tendency to disturbance of stomach and bowels due to these errors in nursing, which, I repeat, could in a great many instances be avoided by the proper care on the part of the physician. It is the right of every mother to know that she should live her life during the nursing period solely with reference to the good of the infant, and that she should do this because, not only the passing year depends upon a supply of the best nourishment, but, as well, because the vigor and robustness

of the future years depend so much upon the development of a vigorous vitality in this first year, and if she does not know this it is the physician's fault.

We should also hesitate long and exhaust every resource before substituting artificial food for breast milk during this first year of life. Better is it to alternate the breast with the bottle than to give up the breast entirely, for, while much advance has been made in the knowledge of the physiology of the infants' digestive and assimilative organs, as well as in the comparative chemistry of mother's and cow's milk, much has yet to be learned. Even as far as they have gone these advances have emphasized the fact that nature has provided a food for the infant which man can not imitate and secure the same adaptability and sterility.

In the event that the infant must be taken from the breast, there is no ground for argument against a wet-nurse being the best substitute for the mother. Human milk is secreted for the human being in infancy, no other milk is. Failing to find a suitable wet-nurse, or because of the inability of the parents to meet this expense, the physician faces the hardest proposition in infantile life—artificial feeding. Theorizing has no place in this problem.

None of the artificial foods approaches the percentages of the solids of human milk. Those which can be used at all can be used only because they are to be added to milk, and not one of them is of such percentages as to make it a good modifier. Condensed milk is exceedingly deficient in fat when diluted so as to make the percentages of albuminoids correct. This explains why infants fed on this display so little resistance when sickness is met. It contains nearly the proper proportion of sugar, when diluted, but this sugar is cane. The limit placed on this paper will not allow an extended exposition of the differences in the digestion of cane and milk sugar. It is enough, really, to say, milk sugar is the sugar of human milk for some good purpose; if cane sugar were better, then we would find that form in our analysis.

As for those foods which contain a cereal, whether converted into glucose, or dextrine, or unchanged, they contain an element foreign to human milk. The function of changing starch into glucose is a late one, coming to its efficiency not until very near the close of the first year. So it is evident, starch unchanged can not be taken care of by the infant under nine or ten months. The question at once arises in reference to the foods which claim to have converted the

starch into glucose or dextrine, why do they add starch at all with the attendant expense of converting it? Why not add the glucose at once? In the latter food, without the addition of milk, it is simply a solution of dextrine, and to repeat, the function which should take care of this dextrine is not developed in the early months.

The food which makes its claim on the ground of predigestion stamps itself as not only useless but harmful. An infant's digestive organs are intended for work. To take this work away from them, in whole or in part, will create trouble just as surely as will the effort to make them digest something foreign to their functions. The only occasion when predigestion is not harmful is when the functions of digestion in the infant are completely suspended. When an infant is denied the milk from its mother, it is the duty of the physician to devise a food which will be easily digested, and will, as well, contain the proper proportion of solids to insure normal development. Because it is easier to use the prepared foods, if he uses any one of them, he is recreant, and unfair to the infant.

It follows naturally to turn to cow's milk as the basis for making a food for the infant. This, not because it is nearest in percentages to human milk, but because it is the most easily obtained. All know the difference in percentages between this and the average human milk, and the question to discuss is as to the modification which will make it easy to digest, and contain the solids in proper proportion.

Many modifications have been advanced, but the one which, up to the time I made my own investigations, gave me the best result, is that given by Roach, of Boston. In this 20 per cent. cream is added to the diluted milk. I found in my experience many nurses, and some mothers too, who were careless in making the mixture. This led me to experiment with a view to finding a one-mixture process of modifying, with this result: I could get the albuminoids down invariably to from 1.00 to 1.33. The fat would, however, frequently be 5.00, but never lower than 3.50. I then limited my observations to the milk from a single dairy, the cream of which kept fairly steady at 15 per cent. For some few years now I have been using the milk from this dairy exclusively, and get a modification with fat never under 3.50, nor with albuminoids over 1.25. On the 5th day of May, 1908, I purchased a bottle of this dairyman's milk from a driver. I submitted a modification of this



bottle to H. B. Baldwin, of Newark. His analysis follows:

Specific gravity .....	1.0261
Total solids .....	10.98
Fat .....	3.50
Milk sugar .....	6.23
Albuminoids .....	1.03
Ash .....	.22

These are practically the figures of human milk, the sugar low because of an error in adding it to the modification. I make this modification as follows:

Top milk.....	10 ounces
Water .....	21 ounces
Lime water .....	1 ounce
Sugar of milk.....	13.5 drachms

This has the advantage of simplicity, which is a great consideration, for not infrequently the careless nurse in making the Roach mixture has a 20 per cent. cream, and, failing to dilute this, gets a resultant of 5 per cent. fat, and too much fat will create trouble just as surely as will too much albuminoids. For the sugar of milk I write a prescription directing a powder to be added to the water used in making the mixture.

It must be understood that this modification is but an average one, and to attempt to feed an infant by an average plan is illogical. In feeding, it is *the* baby, a unit, not *a* baby, we have to deal with. No man, no matter how scientific, or brainy, can formulate a modification which will suit every infant. The above formula may suit a large proportion of infants, but it must be remembered, the digestive tract of an infant, outside the coarse anatomical elements, is just as individual as is the infant itself in mental and physical characteristics, and when the profession realizes this, and, being compelled to resort to artificial feeding, does this on the basis of an analysis of the milk in the breasts of the mother, altering the modification to fit the infant, there will come a rapid lowering of the mortality rate of artificially fed infants. Just as long as the modification is made on the basis of a general comparison between human and cow's milk, will the physician find himself experimenting during the most critical time of infant life. He may make a hit at the first trial. With the next infant he places on an artificial diet, making the percentages all right, according to an average table of percentages, he may have trouble, and if he does not in this case, he will soon come across an infant with—call it an idiosyncrasy if you wish, but I prefer to call it individuality because met so often—which does not digest properly. If an observing

man, he will find this occurring so often that he will begin to question why? The quandary is, is it the baby or the food? More often is the trouble with the food, a fact which any one can demonstrate by making an analysis of the mother's milk and rearranging the percentages by this knowledge, then noting the quick return to perfect digestion.

There is no doubt that there are infants who take care of 2 per cent., or even 2.5 per cent., albuminoids, and thrive, as against a failure to gain on 1 per cent. Then there are infants who do not thrive unless the fat is increased to 4.5 per cent. or 5 per cent. Other children I have had who could not digest even 1 per cent. albuminoids, others still that could not take care of more than 3 per cent. fat. It is evident, too, that some infants require an excess of fat in order to develop the necessary potentials of energy to digest the albuminoids.

That the assimilative power is often at fault is evidenced by clinical experience. Infants are met with who digest their food thoroughly but do not thrive as they should. If, then, the albuminoids are raised, indigestion occurs. The fat is then increased. Immediately fatty curds appear. Then albuminoids and fat are both increased, and incomplete digestion is the result. Finally the original modification is given in increased quantity. Again the evidence of indigestion. This same result from every experiment proves the fault to be in the assimilation. These are the children who begin to improve when cod liver oil is added to the diet. Because this is but adding fat in another form, it would seem as though the fat in the modification ought to meet the indication, but it has failed. Why cod liver oil does, and the fat of cream does not induce improvement cannot be explained, except on the ground that it is more easily assimilated. How many infants have I had brought to me, looking like little old men and women, their digestive powers completely worn out in the effort to make them thrive by forcing a food away above the limits of digestibility, or with stomachs dilated enormously, by overfeeding, in the effort! How often have I seen these children restored, by wrapping them in a flannel, from armpits to hips, saturated with cod liver oil, giving nothing by mouth but sterile water at first, and later highly diluted milk without cream, the dilution diminishing and cream added with the evidence of recovering digestive and assimilative power. This same benefit can be obtained from cod liver oil by absorption in premature chil-

dren, and in infants born with feeble vitality and functionless digestive organs. Many such have I brought to a vigorous condition by using oil in this way.

As to intervals: During the first two months, when growth is most rapid and tissue change consequently greater and faster; when the functions, especially that of the stomach, are establishing themselves, a regular interval of two hours will be the rule, not because the medical profession says so, but because the babies have established it themselves. I have no doubt Cain and Abel did it, and Eve had no physician to advise her, nor a table to consult. It makes no difference whether it is a big baby or a little baby, a fast-growing one or a slow-growing one, during this time the activity and demand of the stomach are the same; the varying degrees of nutrition required being met by a larger or smaller amount taken. After two months this is not so, and there is not only a difference in the interval in the various types of children, but the same child will at one time show hunger in three hours, at another not until four, or four and one-half hours. This is especially noticeable after six months of age. The only rule that can be laid down is not to nurse under two hours in the first six months, and not under three hours after that time.

In regard to the amount to be given, it follows, from the argument used, that there will be the widest divergence. There is no way of knowing how much in quantity the nursing infant takes, except by noting the condition of the breast, or breasts, after the nursing has been finished, and then pumping out the breasts previous to the next nursing to the same condition. This is but approximate, but is the rule I follow when it becomes evident that an infant must be placed on artificial food. If the necessity for artificial food is present from birth there is nothing to guide, except that the average infant's stomach at birth accommodates an ounce, rapidly increasing in its capacity during the first two months of life, and not so rapidly in the following three or four months. Here again must the individuality of the infant be borne in mind, for there is just as great a necessity for giving the proper amount of food, as there is for giving food with proper percentages. Overfeeding will do more harm than underfeeding. If underfed, the fact is quickly known, and quickly remedied, as no harm has been done to the stomach. An infant's stomach dilates very easily and overfeeding will surely end in a dilated stomach if per-

sisted in for a comparatively short time. It would seem that no one would think of giving the child weighing seven pounds the same amount that one of twelve pounds can take, or *vice versa*. Yet I have seen this done many times.

At ten months of age the normally developed infant has developed the function which changes starch to sugar to the degree, that I believe it wise to add a little starch to the diet, for just as surely as a function is hurt by overworking, so will it fail to develop properly, if when it has gained a certain degree of efficiency, it is not given something to do. For this purpose nothing is better than barley water, used as a diluent in place of water.

With the beginning of the second year a systematic giving of food, other than milk, should be begun. Any of the *cooked* cereals can be given in the morning, and at some time from twelve to three, an egg, with a vegetable, can be given. Children at this age can have quite a variety of vegetables. White potatoes (baked), spinach, carrots, peas, string or lima beans, are not only allowable, but are very nourishing, easily digested and well assimilated. Bread and butter, milk or creamed toast and zwiebach will be the breads. Give very few crackers and, when giving, give only the dry, brittle ones. Custards made with an egg, beef blood, alone or on bread, and later, lamb chops, steak, roast beef, poultry and fish will also be on the dietary.

From one year to fourteen months a typical day, as respects diet, is: a cooked cereal, with cream, and a piece of bread and butter for breakfast. During the morning a glass of undiluted milk. For luncheon an egg with some bread and butter, and any one of the vegetables mentioned. Again in the afternoon a glass of milk. For the evening meal, a bowl of bread and milk, or a glass of milk with some creamed toast. During this time a custard, or bread with plenty of beef blood (at least, three teaspoonfuls) can be substituted for the egg.

After fourteen months, one of the meats, poultry or fish should be added. Meats should be confined to lamb and beef, except that a slice of bacon is occasionally allowable, even at as young an age as one year. Any of the meat broths, free from fat, as well as vegetable soups, can be given to a normal child, after one year of age.

Orange juice is well assimilated, and can readily be given as early as the sixth month. Fruit itself can be given after a year of age, such as apples, always scraped, peaches and prunes. After the eighteenth month, ap-



ples, pears and peaches can be taken whole, care being taken that the skin is thoroughly masticated. Indeed, many children of constipated habit can be brought to regularity of the bowels by the judicious use of fruit, always bearing in mind that it is the skin of the fruit that is laxative.

It will be gathered from what has been said that after a year of age milk should begin to retire to the background. By the time a child is two years of age, it should be an adjunct only.

### THE PASSING OF THE FAMILY PHYSICIAN.

We often hear physicians say that the family physician belongs to a class that has outlived its usefulness and is passing away. We cannot believe, however, that this view is entertained by many serious people.

To the family physician are presented all diseases at their incipency. To suppose that his function will become, as the time passes on, a mere distributor for specialists is, we think, an absurd conclusion. Still, this prediction is freely made by some. Such a view robs the family physician of any fitness for the practice and supposes him a mere nonentity.

We have only to view the situation in all of its bearings to see the erroneousness of this idea. We see the family physician as a man well versed in practical medicine and in touch with its progress. Many family physicians are expert diagnosticians, and nearly all are thoroughly proficient in all that renders a physician an expert in internal medicine. The experience of these men must of necessity render them thoroughly drilled in all that makes a physician acceptable and useful to his patients. In fact, the family physician is in the true sense of the word a specialist in internal medicine. To his fitness in this very important branch he brings a general and working knowledge of obstetrics, surgery and other branches that broadens his scope in information and adds to his efficiency. The family physician sees the science of medicine from a viewpoint that is wide and commanding; the specialist is necessarily narrow in his scope, and his opinions often show the result of this want of more extended field of study and experience.

While specialism is growing, it is quite illogical to allow one's self to think the family physician will pass away, and one will, when ill, have to send for this or that specialist. This day will never come, we think. But with the progress of medicine will come a new idea of specialism. The fact is now specialism is overdone in medicine. Young and often incompetent men, after attendance upon a post-graduate course, take up a specialty without that experience with morbid processes which a general practice gives to the physician. Only those are fit for special work who have a first-class knowledge of disease processes and who have taken up special work after he has found his preference and superior skill in that direction while in general work.

Again, it is a commonly accepted fact that the assumption of a specialty does not signify superiority, nor does it always imply competency. These statements are plainly true and will not be disputed.

In view of this it is not very reasonable to think the day of the general practitioner is about to see its sun go down behind the western hills. Oh, no! The day of the family physician will long continue, its effulgence will not be dimmed by specialism, its possibilities are magnificent, and its beneficence will be the heritage of succeeding generations—Editorial *Maryland Medical Journal*, July, 1908.

### ANNUAL REPORT—SUSSEX COUNTY.

*To the Chairman of the Committee on Scientific Work:*

The Sussex County Medical Society has held two regular meetings during the past year. The attendance at both was unusually small, but the meetings were very interesting. A number of interesting cases having been reported at each meeting. At the annual meeting in May Dr. Harvey, the Councilor for this district, was present and read a very instructive paper on "Ectopic Gestation and Its Management," which was listened to with a great deal of attention, being of a very practical nature to the general practitioner and especially to the Sussex County members who do not often come across these cases. Dr. Hunt exhibited to the members of the society a number of rare and ancient works on Anatomy in their original print and bindings, among them being "The Anatomy of the Human Body," printed in 1503; another "Anatomy," by Jacob Caxpus, 1530, and one written by Eustachius, printed in 1722. They were all printed in the original Latin and in fine state of preservation.

During the past year there were no epidemics of a severe character. There was a general epidemic of rotheln. The physicians present reported a general absence of any severe type of diseases, but that there had been more sickness than usual.

The following were elected as officers for the ensuing year: Dr. Edward W. Jones, Layton, President; Dr. Enos E. B. Beatty, Newton, Vice-President; Dr. Shepard Voorhees, Newton, Secretary; Dr. Ephraim Morrison, Newton, Treasurer; Dr. H. D. Van Gaasbeek, Sussex, Reporter.

Respectfully submitted,  
H. D. VAN GAASBEEK, *Reporter*.

**Address by Surgeon-General Rixey.**—Surgeon-General Presley M. Rixey, United States Navy, has promised to address the Essex County Medical Society in the early fall.

**New Members of the American Medical Association of New Jersey:** Enos E. B. Beatty, Newton; Helen R. Carter, Newark; Alfred Q. Donovan, Elizabeth; Charles H. Finke, Jersey City; William Freile, Jersey City; William A. Lake, Erma; Leslie C. Lyon, Magnolia; Elmer A. Scott, Asbury Park; Charles E. Silk, Perth Amboy; James L. Vail, Cranford.

Don't incise a furuncle of the auditory canal. Tampon the canal with a wick of cotton or gauze saturated with liquor Burwii (acetate of aluminum), resorcin-alcohol, or balsam of Peru, and wait until pain has disappeared. Hot applications may be needed. A furuncle pointing and threatening to burst may be opened with a superficial cut. Avoid wiping the pus along the canal. The result is almost inevitably a fresh crop of furuncles.—*Amer. Jour. of Surgery*.

# THE JOURNAL

OF THE

## Medical Society of New Jersey.

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**SEPTEMBER, 1908.**

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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We again call the special attention of the authors of papers read at the recent annual meeting of our Society, and also of those who took part in the discussions, to the great importance of returning promptly proofs sent for approval or revision. We have been compelled, by the failure to do so, to defer the insertion of two papers until next month and to admit two read at a later session which were not discussed.

### THE DOCTOR IN POLITICS AGAIN.

We note with approval that the medical journals throughout the country are advocating the more frequent election of medical men to the halls of legislation, State and National, and we are favorable to the action of the American Medical Association in commending the election of Dr. C. A. L. Reed to the United States Senate; by no means because of his party politics, for we would as readily commend the election of a doctor from the opposite party who had the same qualifications for that high office. There is great need of half a dozen or more medical men of ability in both houses of Congress to guide wisely and zealously the legislation affecting the health interests of our country.

We allude to the matter again at this time because the people are about selecting their nominees for the halls of legislation in our State. We would urge medical men qualified mentally and morally for this

position who are solicited, to accept nomination, even if it does require sacrifice, for the public good, and would also ask that the members of our profession will advocate the nomination of medical men whom they believe are well qualified for such positions. But here let it be clearly understood that we make a very decided discrimination between the men willing to take or eager for nomination, or suggested for nomination, who have an eye single for the public good, and another class of men—and we are sorry to believe that our profession like all other classes of men have them who seek or would accept office mainly, if not solely, for the personal honor, personal pecuniary gain, or the securing of mere political power, rather than the good of the State and the blessing of humanity, as well as the honor of the profession. The latter class is not worthy of our commendation or support. Let our medical nominees be clean, intelligent, honorable, moral men who will honestly endeavor to give us wise legislation that shall secure and preserve health and good moral, educational and general prosperity, and then let us do all we can to elect them.

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### ELIAS J. MARSH, M. D.

Our Society has again been called to mourn the death of one of its ex-presidents—Dr. Elias J. Marsh, of Paterson, who passed away after a long illness August 3rd, at his home in that city. Dr. Marsh was elected president of our Society in 1891 and presided over the annual meeting in 1892. As in the case of Dr. Elmer so in that of Dr. Marsh—the father had occupied the same office, Dr. Elmer, Sr., in 1860, and Dr. Marsh, Sr., in 1850, in each case the son bearing worthily the same name as his father. Dr. Marsh's life and services in military, professional and civic positions of honor and responsibility were faithful and distinguished and won for him the greatest respect of all whom he served. We are pleased to insert in other columns of this issue, and to endorse, the beautiful and deserved tributes to his memory by the Passaic County Medical Society and by Dr. Balleray.

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## OUR LOSSES AND OUR FUTURE.

Within the past eight months the Medical Society of New Jersey has lost by death three of its most honored members and ex-presidents—Drs. John C. Johnson, William Elmer and Elias J. Marsh. Losses that will for years to come be very deeply felt, as well as at the present time when such men are needed. It is to a long line of just such men that our State Society owes its honorable record and its present high standing, dignity and influence. They were men who never sought office; who would never permit political methods—manipulation, combination or so-called log-rolling—to be used for their election to office; they were modest, faithful, intelligent, scientific men; men of the highest character, who stood for principle rather than policy at the sacrifice of principle.

Fellow members of our State Society, let the influence of these lives abide with us; let our lives and actions be patterned after theirs and thus keep to the front, elevated to the highest possible position, the standards of the Medical Society of New Jersey.

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## ADVERTISING AND USE OF PROPRIETARY PREPARATIONS.

This Journal yields to none in loyalty to the American Medical Association and in appreciation of the good work that the Council on Pharmacy and Chemistry has done and is doing in weeding out worthless preparations, and giving information to the general practitioner, who has not the time, and may not have the ability, to investigate for himself. We also believe that our State Society journals should not be so eager to meet the expenses of the journals by accepting advertisements of unethical or questionable preparations. But we cannot endorse the proposition to bind ourselves to admit *nothing* in our Journal that the council has not passed upon or has hastily decided as questionable, or condemned. We have been pained to see severe condemnation of preparations concerning which there is decided difference of opinion among men

who are among the most ethical, and a rather hypercritical spirit, in the condemnation, of the firms that manufacture those preparations, which we believe is not only improper, but tends to destroy the trustworthiness and value of the condemning judgment passed upon them.

We are all fighting a gigantic combination and should do so in a manner and spirit that will not alienate any who desire to help in the fight, even if we do not approve *all* their methods of conducting business. When their methods are proven to be dishonest or dishonorable and their preparations are found to be unethical, it is, we believe, the proper time to dispense with their help and to refuse to advertise or prescribe their preparations. Let us not be misunderstood. We shall loyally support the A. M. A. Council and as a rule—with very rare exceptions—shall shut out from our advertising columns what the Council has condemned; but, recognizing the fact that the ablest and best of men—even chemists—make an occasional mistake, there may possibly be an exceptional case, when, on presentation of proof concerning a preparation, satisfactory to our Publication Committee, an advertisement may be admitted of a preparation that has been disapproved, or has not yet been acted upon favorably by the Council. We are uncompromisingly opposed to the advertising of any nostrum in this JOURNAL.

We believe in unifying and properly organizing the profession and to a certain extent centralizing the power to outline and direct the general policy and conduct of the State and County Medical Societies. But there should be no arbitrary exercise of power that would crush out a proper spirit of independence of thought and action. We believe that tends toward demoralization and destruction of the unity and advance of the profession. This Journal will in the future as in the past stand for the maintenance of ethical principles—in the admission of advertisements as in all other matters, but we must claim and insist upon exercising an independence that

we believe to be right in our relations with other societies and reputable manufacturers of ethical preparations.

We desire at the same time to express our belief that for the best interests of the members of the profession and their patients, it would be far better for the physician to prepare his own formulæ and send them to some reputable druggist, than to prescribe proprietary preparations containing several ingredients that may not fully meet the requirements of the cases in hand. He should certainly avoid using all preparations whose active ingredients are not definitely made known to him, for that savors of empiricism rather than of the practice of scientific medicine.

We would call special attention to the rule adopted several years ago—to which attention has been called on several occasions—that papers read at the annual meeting of our State Society, become, when presented, *the property of the Society*, for publication in our Journal. Their first appearance in print should be in our journal, unless a special and different arrangement is made by their authors with the Publication Committee before the date of the annual meeting.

**Thomas Jefferson to Dr. Jenner.**—Monticello, Virginia, May 14, 1806. Sir:—I have received the copy of the evidence at large respecting the discovery of the vaccine inoculation, which you have been pleased to send me, and for which I return you my thanks. Having been among the early converts in this part of the globe to its efficacy, I took an early part in recommending it to my countrymen. I avail myself of this occasion to render you my portion of the tribute of gratitude due to you from the whole human family. Medicine has never before produced any single improvement of such utility. Harvey's discovery of the circulation of the blood was a beautiful addition to our knowledge of the human economy; but on a review of the practice of medicine before and since that epoch, I do not see any great amelioration which has been derived from that discovery. You have erased from the calendar of human afflictions one of its greatest. Yours is the comfortable reflection that mankind can never forget that you have lived; future nations will know by history only that the loathsome smallpox has existed, and by you has been extirpated. Accept the most fervent wishes for your health and happiness, and assurances of the greatest respect and consideration.

THOMAS JEFFERSON.

## Articles from Medical Journals.

### A Recognition of Services Rendered by Hospitals.

Editorial *Interstate Medical Journal*, Jan., 1908.

That hospitals should be compensated for services rendered to those who, though belonging to the humbler class, nevertheless receive such treatment that without it death would probably supervene is an illuminating idea that has come to us by way of London. In a recent action tried in the King's Bench Division by Mr. Justice Darling the jury awarded to the plaintiff, a boy who had been seriously injured through being knocked down by an omnibus, £750 damages, and at the judge's suggestion the jury also decided to turn a certain part of the damages over to the hospital in which the boy had received the surgical intervention which saved his life. To quote Mr. Justice Darling: "In a case like this, where a person receives the benefit of a charitable institution and such benefits as have been conferred on this boy; where it is perfectly obvious that the boy would have died but for the accurate diagnosis of the clever house surgeon, the immediate decision that an operation was necessary, and the calling in of a skilled surgeon, and where the staff of the hospital has exercised such skill, a substantial contribution should be made to the institution."

Here we have considerable food for thought. With a carelessness, not to say ingratitude, the public at large has always demanded the best medical or surgical treatment from our hospitals without so much as a thought as to the skill which is exercised by the physician or the surgeon at a critical moment or the expense of harboring, with care and solicitude, a patient in regard to whom no idea of compensation could be entertained. The accepted fact that our hospitals, with their corps of skilled physicians and surgeons, must not withhold from a poor patient who has met with an accident or who is critically ill the immediate relief which it is in their power to give has passed beyond the province of controversy; but when, after receiving the benefits which only scientific treatment can bestow, a patient is awarded damages, all courts throughout the world should imitate the wisdom which Mr. Justice Darling showed in the recent case tried in England.

The popular idea that the men who preside over the destinies of our hospitals are above recognition for their own services and are indifferent to the welfare and prosperity of their institutions is born of a figment on the part of the public that the best fruits of medical or surgical skill are theirs by right, irrespective of the possibility of a public acknowledgment, as was instanced in the English judge's words, or a monetary return to a hospital in case damages are awarded.

Skill is only acquired after many years of apprenticeship, and to take it as a matter of course, to be had for the mere asking, is placing it on a low rung in our estimate of unusual qualities. Again, skill, as we all know, cannot always receive its due reward in a monetary sense, nor would we have the possessors thereof delight in its possession merely as a means to that end, but it should enjoy the compensations which come from an appreciative sense of its value. A public that jogs on from precedent to precedent and



accepts a thing just because it has become inured to it needs a jolt to awaken it to a proper understanding of certain abuses which, by custom, have become inherent in our social system. And the custom to regard a surgeon's skill and a hospital's care of the sick, especially in such circumstances when intervention is imperative, as a matter of small significance indicates an insatiable desire on the part of the public to get the lion's share of what this world offers, with no better thought behind the effort than avarice, greed and selfishness.

### Robber Fees.

Paper by W. H. Neel, Jr., M. D. Anson, Kan., in the *Journal of the Kansas Medical Society*, November, 1907.

What is the significance of the caption, "Robber Fees" as applied to the physician? My idea of a robber fee is a fee so small that no physician with ordinary practice and ordinary environments can possibly maintain an existence.

Let me illustrate: I recently attended the family of a well-to-do farmer, and charged him the customary fee, fifty cents per mile and one dollar extra. He paid my bill without hesitation or ill feeling, as his previous family physician had been accustomed to charge him likewise. In course of conversation, though, he told me of the cheapest doctoring (as he expressed it) he had ever had done in Kansas. "One night I got sick, my doctor, Dr. A., was out of town; so I called Dr. B., a physician in the same town. Dr. A. had always charged me six dollars and fifty cents, as the distance was eleven miles. But Dr. B. only charged me three dollars and fifty cents, and said it would not have been so much but he just had to hire a horse." Strange to say, Dr. A. continued as the family physician; and Dr. B., to my knowledge, was never called again, as he had expected to be.

A physician moving into a new community announced that he would attend the first twelve cases of confinement for five dollars each; and would make no charges for office practice to exceed the actual cost of the medicine. Many of the older gentlemen present have no doubt had more striking instances; but these two incidents have come under my own observation, and illustrate to an exaggerated degree what is meant by robber fees.

The cost of living, and of education, together with nearly everything else, have made heavy advances in recent years; but the physician's fees have remained unchanged for perhaps three-quarters of a century. Seventy-five years ago medical science was much more limited than at the present time; and the dollar counted for a great deal more than now. Compare, if you please, physicians' knowledge then with that of the modern and up-to-date practitioner. The former knew nothing of antitoxin; seldom quarantined against infectious diseases; did not know of appendicitis; could not positively differentiate typhoid and malarial fever; had never seen a curette; did not know the gall bladder was subject to infection; only the most skilled surgeons would perform a tracheotomy; but few general practitioners used obstetrical forceps; seldom repaired a lacerated cervix or perineum; did not know that asepsis ever would or could exist. Surely the physician who is well informed on these subjects and can do these operations, when necessity demands, ought to be worth more in dollars and cents to

his patrons than the physician who was in the earlier years ignorant of them.

How about the comparison in standards of education? The early practitioners had for the most part a very limited common school education; they spent two terms of five months each at the medical college, and were then privileged to practice. How different in the case of the modern graduates in medicine of to-day; they have for the most part secured a college education (and this demand for a college education before entering the medical colleges of our land will become more and more essential as time goes on); they must spend from four to six years in the medical colleges; and many have held an internship in some hospital.

Now that the condition of ridiculously low fees does exist in so many communities, who is responsible? Surely not the people. No. It is the physician himself. Both veterans and young practitioners are responsible. I have heard some one say, "Certainly when the older men are willing, the younger ones ought not be bashful." I am sorry that this state of robber fees does exist, but it's a fact—a deplorable fact—that we have in our profession men who will, through lack of self-esteem and loyalty to the profession, stigmatize it and lower its dignity by placing a valuation upon their services which is on a par with the common day laborer.

The community surely values a physician according as he places a true valuation upon his ability and services. True, his fees have to be governed to some extent by the local commercial conditions. But if every practitioner in a given community would charge what he conscientiously knows to be just, instead of deducting 20, 30 or perhaps 50 per cent., as some do in order (as they think) to retain the patient's patronage, there would be but little room for complaint.

I would not have you believe, gentlemen, that I favor extortion. Far from it. I believe that we, as physicians, must be generous with our knowledge and skill; even to the rendering of gratuitous services, when the circumstances of the individual seem to demand it. Who is there of us who has not gone into hut and hovel, at the midnight hour (when sleep and rest were greatly needed) and with willing hands administered to the sick and suffering, well knowing that we would not receive one penny as compensation? Who is there among us who does not consider well a patron's financial condition before making our charges, especially for surgical and consultation practice? This I regard as being equitable and just; but the physician who will make a small charge to the man who is well able to pay for the services, simply with a view of retaining his patronage, is a disgrace to our most noble profession and a menace to its progress.

Gentlemen, before making your charges, I ask you to consider well these facts; you are expected to be proficient in your line of work; to be modern in equipments; to treat a great many deserving poor gratuitously; to contribute as largely as any other individual in the community for benevolent purposes; to educate your children, both in letters and in art, and keep them in the highest social circles. Then, too, you must have time for study and recreation; and really should take post-graduate work every few years. If you are not able to give your patient every advantage for his life known to modern medicine and practice, then you are not worthy to be called into the sick chamber. In other words, you are

expected to keep up to date by study and post-graduate work; so as to give the patient advantage of every possible factor which may add to his recovery.

All this costs you dollars; dollars that are hard earned; dollars that are frequently difficult to get. If you feel that your services are not worth as much as those of your competitor, wipe the dust from off your text-books; read up; take a post-graduate course; make yourself worthy the honor conferred upon you by your alma mater, as well as worthy of the confidence imposed within you by your patrons. If you are not a help to the profession, get out. Don't be a "hanger on." Push, and do everything you can for the advancement of your high and noble calling to its highest possibilities.

## Medical Literature Items.

**Olive Oil in Obstruction of the Esophagus.** A. L. Hoggdon, M.D., Pearson, Md.—A laborer consulted me one evening for an obstruction of the esophagus due to the lodgment of a piece of food, probably meat, which he had swallowed at dinner. He had not been able to swallow anything, even water, since the obstruction occurred. I administered olive oil, a portion of which he was able to retain, and in about five minutes the obstruction was removed and he was able to swallow water readily.—*A. M. A. Jour.* (Dec. 28.)

**The Treatment of Bedsores.** R. Teller, Giesen. *Muenchener Medizinische Wochenschrift*, May 12, 1898. There are cases where decubitus cannot be avoided, especially in paralyzed patients, in marked asthenia, etc. Prophylactically, strict cleanliness, care of the skin, air cushions, water beds, etc., are generally employed. After a bed-sore has developed a water bath is used in large hospitals, but is not practicable everywhere. The author keeps the affected skin dry by free use of Lassar's paste. He cleans up the infected necrotic granulations by a small wet dressing of aluminum acetate or hydrogen peroxid and dusts the ulcer with bismuth subgallate. To bring about more rapid healing the wound edges are massaged daily for from two to ten minutes. A warm full bath is given, the patient allowed to rest for an hour or more and then the local massage is applied. Finally the dressing is renewed. Under this treatment the most stubborn bedsores rapidly begin to regress and heal.

**The Local Use of Magnesium Sulphate in the Treatment of Erysipelas, With Report of Cases.** A. Tucker, Philadelphia. *Therapeutic Gazette*, June 15, 1908. With this treatment, the pain and discomfort are relieved in a few hours, the temperature falls to normal rapidly, usually within the first 24 hours, and the patient recovers in from two to seven days. The method of application is as follows: A saturated solution of magnesium sulphate is applied on a mask consisting of 15 to 20 pieces of ordinary gauze; this is covered by some non-absorbent material and kept wet as often as necessary. No other treatment is necessary. The report is based on observations upon 35 cases.

**Albuminurias.**—Albuminuria may be due to a great variety of causes, both physiologic and pathologic, of which structural disease in the kidneys forms but a small, if highly important, minority. The majority of the cases are due either to altered blood states or to failure in the normal vasomotor mechanism. This failure may manifest itself in one of two directions. In the first, chiefly by some means so far undiscovered, the blood-pressure in the splanchnic area arises, and is maintained at a sufficiently high level to induce a renal plethora and consequent albuminuria. Of such are the cases of hyperpiesis, as in the instance quoted. In the second place, owing to a local or general vasodilatation, the blood-pressure in the splanchnic area falls to the point at which a renal stasis is induced. Of such are the cases of cyclical, postural and athletic albuminuria of which also instances are cited, cases which for the most part occur in young adults, in whom the vasomotor response is either undeveloped or for some reason is inadequate. Having regard to these facts, the writer ventures once more to insist not only that, of itself, albuminuria affords no evidence of renal disease, but that, of itself, it does not present even a reasonable suspicion of the existence of such disease, any more than, of itself, dyspnoea presents a reasonable suspicion of cardiac disease.—L. William (*Clinical Journal*, April, 1908).

**Pregnancy Amaurosis.**—E. Holzbach, Tübingen (*Zentralblatt für Gynäkologia*, May 23, 1908). Transient amaurosis in the course of jaundice of pregnancy, uremia and eclampsia are well known and frequent, but true optic atrophy is very rare. The case reported is that of a woman of thirty-seven years, pregnant for the tenth time, who noted decrease of vision ("a veil before her eyes") beginning in the third month and leading to total blindness near term. One eye showed complete optic atrophy without hemorrhages, the other eye showed distinct but less advanced atrophy; no other ocular changes. Lues, tabes, etc., could be excluded; there was no nephritis. Premature labor was at once induced and six days post-partum perception of light returned; eight days later sight in one eye was restored to 5/8-5/6. The other eye remained permanently blind. As the woman had eight living children sterility was induced by ligating the Fallopian tubes. Sterilization is not indicated in every case, for though recurrence of the disease with successive pregnancies is common, this does not always occur. In this disease the pregnancy should always be interrupted as soon as the diagnosis has been made, as the gravity of the prognosis increases with the progression of pregnancy.—*Amer. Jour. of Surg.* (August, 1908).

**Chronic Ulcer of the Stomach and Duodenum.**—William J. Mayo, Rochester, Minn.—On account of the anatomical relation between the stomach and the duodenum, there is a close association between the organs in function and in pathology. The stomach acts as a temporary storehouse for food, the five-sixths lying to the left being concerned in storage and maceration, the other sixth, lying to the right, carrying on the grinding process. The digestive processes are the result of chemical stimulation rather than nerve force. One of the factors in the forma-



tion of an ulcer is the traumatism inflicted in the grinding pyloric end of the stomach and that portion of the mucous membrane of the duodenum which receives the physical impact of the acid chyme as it is injected through the pylorus.

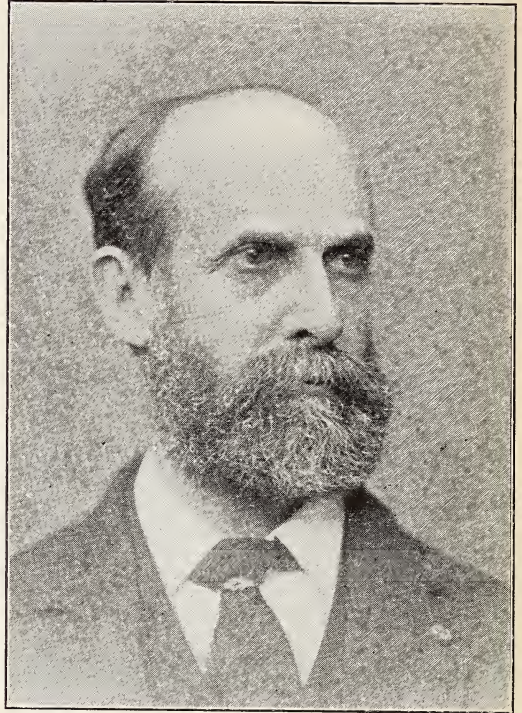
When an ulcer has once formed it has a tendency to penetrate into the muscular coat and is periodically irritated by the physiological action of the muscles, and by the introduction of food particles into its depths, giving rise to pain which is so characteristic of the disease. The average history of the patients with chronic ulcer shows that the disease has existed for some years. The periodicity of the attacks is as well marked as are the attacks of appendicitis or gallstone disease, the only difference being that in the early history the exacerbations are to be measured by days or weeks and the intervals by months or years of comparative freedom. The most valuable means of diagnosis lies in the history of the patient. There is usually an excess of hydrochloric acid. Pain is seldom absent. Hemorrhage is misleading, as it may be due to a cirrhosis of the liver. The complaint of gas in the stomach is nearly always a constant symptom. Chronic ulcer sooner or later involves the peritoneum. Local peritonitis over the seat of the ulcer is not infrequent, and in many cases perforation occurs with slight leakage more or less protected by exudate, giving rise to attacks of regional peritonitis. The result of a chronic ulcer is a permanent narrowing of the lumen. In a certain percentage of cases a tumor can be felt. The chief causes of death are hemorrhage and perforation. Ulcer of the duodenum rarely becomes malignant, but does interfere with the progress of the food, so that gastrojejunostomy is the operation of choice, supplemented in special instances by excision.—*The St. Paul Medical Journal*, June, 1908.

**Difficulty in Respiration and Deglutition Due to a Large Thymus in a Child Ten Weeks Old.**—W. Hinrichs, in the *Berliner Klinische Wochenschrift*, April 27, 1908, reporting a case, says:

The child was admitted to the hospital for a large angioma of the ear. It was noticed in the course of the examination that the child was poorly developed, pale, and that its respiration was labored and strident. The child also swallowed with much difficulty. During expiration and with the head extended, a small tongue-shaped tumor was noted on the left side of the jugular notch. In the course of observations the child appeared to be losing ground and an operation was decided upon. A longitudinal incision in the lower part of the neck was made; the capsule of the thymus was split, and the largest part (about 6 gr.) of the gland was removed. Respiration became promptly normal and upon the first feeding no difficulty in deglutition was noted. One month later the child was reported well and gaining in weight.

"Black eye," developing in an infant, without any history of injury, should always arouse suspicion of scurvy (Barlow's disease). It is generally distinguished by lack of swelling, absence of bruise or redness of lids, and rapid gravitation of the blue discoloration to the lower lid and cheek. The orbital hemorrhage may take place on the other side, after a short interval.—*Amer. Jour. of Surgery*.

## Obituary.



### ELIAS J. MARSH, M. D.

Dr. Marsh was born in Paterson, August 4, 1835. His father, of an old Perth Amboy family, graduated from P. and S. College in 1828, and began practice in Paterson; he was president of the Medical Society of New Jersey at the time of his death in 1850. His mother was a sister of the late Chief Justice Beasley, of this State. The son—the subject of this sketch—received the degree of A. B. from Columbia College in 1854; M. D., from the college of P. and S., 1858. He entered the army in 1861. After the battle of Gaines Mill, in 1862, being in charge of a *field* hospital which was left behind in the Federal retreat, and remaining with the wounded, he was captured by the Confederate advance and exchanged after a few weeks. He had charge of the Judiciary Square Hospital, Washington, in 1863. Afterwards with Gregg's Division, Cavalry Corps, and later post surgeon, West Point, 1866-'68.

Resigning from the army in 1870, he began practice in Paterson. Shortly afterward he was appointed on the staff of St. Joseph's Hospital, with which he was connected until 1906. In 1874 he was elected medical director of the Mutual Life Insurance Company, of New York, for which company, during the next few years, he compiled and tabulated their entire mortality experience. In 1877 he was appointed the first president of the New Jersey State Board of Health. Afterwards he was appointed a member, and for some years was president of the board of health of the city of Paterson, from which he resigned in 1885, when he was appointed trustee of the Public Library, and in 1887 was elected president of its board of trustees, which position he held till he resigned from the board in 1907, on account of his health. In 1885 he was



appointed surgeon to the Paterson General Hospital, which position he resigned in 1900. In 1890 he was elected medical director of the Mutual Life Insurance Company, whereupon he retired from private practice.

In 1891 he was elected president of the Medical Society of New Jersey. In 1896 was appointed by Governor Griggs on the first Sewage Disposal Commission. In 1900 he was awarded a gold medal at the Paris Exposition for work on mortality statistics of the Mutual Life, which was prepared in connection with the company's exhibit.

He was for many years a vestryman of St. Paul's Church, Paterson. January 1, 1907, he was retired from the Mutual Life Insurance Company on account of age as medical officer in reserve. He spent his remaining days quietly at home, where he died August 3, 1908.

### IN MEMORIAM.

#### Action of the Passaic County Medical Society.

To a community is sometimes given a man who, by reason of service, achievement, or personal character, stands pre-eminently among his fellows. Such a man, for all these reasons, was the late Dr. Elias J. Marsh. His life was one of service; service to his country, to his community, to his profession, to humanity; and to him, to serve meant to achieve. Responding to his country's call, in her hour of need, he offered his life, his health and his freedom. On the battlefields of the Rebellion, in the army hospitals, within prison walls, in warfare against the savage Indians of the West, he displayed those qualities of courage, determination, devotion to others and disregard of self, which go to make up the character of the true patriot and the true soldier. After ten years of such service, when he felt that the country could dispense with his services, disregarding the certainty of high and honorable advancement, he returned to Paterson, the city of his birth and love, and took up the work which had been laid down by an honored father. The history of his life here would mean the history of nearly every movement for the benefit of the community, the advancement of his profession and the good of humanity. One of the founders of the hospitals, of the board of health and of the public library, he was ever active in their service. In the broader field of the State, he aided in the organization of the State Board of Health, the New Jersey State Sanitary Association, was a member of the first Sewerage Commission, and was president and one of the most influential members of the State Medical Society.

As a physician, he possessed to a pre-eminent degree the respect of the profession and the confidence of the public; aided by natural ability, perseverance, and the habits of a student, he had converted his mind into a vast storehouse of scientific medical knowledge. To this he had added a large fund of practical experience, acquired through exceptional opportunities, and this he was fortunately able, by reason of his mental characteristics, to weld with the other. Then, too, he had been born with the true professional instinct; unassuming, unselfish, absolutely honest; in every case he had but one thought—the good of the patient. The combination of all these qualities in one man is rare, and their possession by Dr. Elias J. Marsh gave

to him a professional position granted to but the few.

His personal character was that of the true, high-bred gentleman; the soul of honor, ever thoughtful of others and regardful of their feelings, his influence was ever upward; and for better things his was also the helping hand and the word of cheer. Although a hard and persistent fighter, in a cause he believed to be right, yet he was never known to display any personal feeling. When the fight was over, it was forgotten. Although active in so many directions, he seemed to possess no enemies. He was so direct, so honest, so true, that no one seemed to expect him to take any other course than the one he chose.

Appreciating the services, the achievements, the character of Dr. Marsh as we do, the members of the Passaic County Medical Society desire to express to his family our sense of the great loss sustained by them, by the community, and by the medical profession. Also, to add our grief to theirs; for we too respected, admired and loved him. There is sweet comfort in the knowledge, however, that he has well earned the rest to which he has gone. His song of life was strong, and grand, and true, and "the singer who has sung is ever alive, we listen and always hear."

DRS. J. L. LEAL, *Chairman*; A. F. McBRIDE,  
J. M. STEWART, W. M. BLUNDELL, W. B. JOHNSON,  
*Committee.*

#### A Tribute to a Dear Friend.

"I love the man whose deeds are earnest,  
Whose heart is faithful, whose words are true.  
And little it matters where God has placed him,  
Or what is the work it is his to do.

Whether he sits in halls of marble  
And makes the laws for a mighty land,  
Or dwells where the forest wild birds warble  
And grasps an ax in his brawny hand."

Just such a man was my late friend and colleague, Dr. E. J. Marsh. I was associated with Dr. Marsh in hospital work for over thirty years, and in all that time our relations were most cordial. We were both elected to serve on the staff of St. Joseph's Hospital, Paterson, in 1871, and from that time on he was my guide and friend. He brought to his hospital work in his new field of labor, the ripe experience acquired by many years of active service as surgeon in the regular army, while I brought nothing but ordinary intelligence, a willingness to learn, and the headful of inaccurate information bequeathed to every recent medical graduate by his alma mater.

Under the circumstances it was but natural that I should conceive a feeling of admiration and respect for my colleague, which more intimate acquaintance only served to heighten. I soon found that Dr. Marsh was my friend and it became the height of my ambition to merit his approbation. If he commended my work I was happy. If he rebuked me, as he sometimes did, I took it in good part, knowing that, "Faithful are the wounds of a friend." His wise counsel and valuable assistance were always mine for the mere asking; and in hospital or private practice my appeal for help always met with a ready response at any hour of the day or night. In the early part of my professional career, I



feared that I was trespassing on his good nature, but his kindly look and cheerful smile dispelled my apprehension and made me feel that he was always the same true friend—to-day, to-morrow and forever. Is it any cause for wonder that I loved him? Could any man with a heart capable of appreciating the disinterested, self-sacrificing kindness of another fail to love him as Jonathan loved David? Dr. Marsh was a gentleman to the very marrow; of liberal education, honorable, straightforward, manly, considerate of the feelings of others, courteous and kind to his professional brethren. He was a man of unimpeachable integrity and always acted according to the dictates of his judgment and conscience. His attitude on all questions was unmistakable—hypocrisy and deceit were foreign to his nature.

"Blessed is the man unto whom the Lord imputeth not unrighteousness, and in whose spirit there is so guile." I endorse the sentiment and feel that it applies with special force to my lamented friend and colleague. From a professional standpoint, Dr. Marsh was the type of the ideal practitioner—jealous of the dignity and honor of his profession; faithful in the performance of his duties; lenient towards the frailties of humanity, he worked with an eye single to the good of the patient, unmoved by personal considerations. At the present day amid the commercialism which prevails in what was once, and should be still, the most honorable of all professions, the example of Dr. Marsh should shine like a beacon light before the younger members of our guild and guide their steps aright. It should teach them that there is something in the life of the doctor, besides the acquisition of fame or wealth, that brings lasting satisfaction—the sense of duty well performed, the love and gratitude of his patients, and the esteem and respect of his fellow workers in the vineyard of the Master.

I have not attempted to eulogize my departed friend. Nothing short of the eloquence of a Mark Antony could do justice to his many virtues; he needs no eulogy from me; his life and work speak for themselves.

Moreover, if he could speak he would say, in the language of Othello: "Speak of me as I am." This I have tried to do. It is the simple tribute of a grateful heart. While he lived I loved and honored him, and now that he is gone I cherish his memory with respect and affection.

G. H. BALLERAY.

## Persona Notes.

**Dr. James I. Brown**, of Montclair, has been spending his vacation in Maine.

**Dr. William T. Chandler**, of South Orange, is enjoying a Western trip. He expects to return on or about September 15th.

**Dr. William B. Graves**, of East Orange, has returned from a pleasant sojourn in Alaska.

**Dr. Edward J. Ill**, of Newark, has been spending several weeks at his summer home at Island Heights, N. J.

**Dr. Chas. J. Kipp**, of Newark, is in Europe, enjoying for a brief season his vacation there.

**Dr. Henry Mitchell**, of Asbury Park, has been West. He attended the annual meeting of

the American Public Health Association, in Winnipeg, Manitoba.

## BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

### Monthly Statement—July, 1908.

There were 2,589 deaths reported to the Bureau of Vital Statistics for the month ending July 15, 1908.

The mortality from measles and scarlet fever continues to be high. Measles is generally looked upon as a trifling disease, which is a serious mistake, as far more children die from measles than from scarlet fever. It is especially dangerous to very young children and whenever a child is attacked by a bad cold in the head, a cough, running at the nose, sneezing and watery eyes, it should at once be isolated and the family physician consulted.

Scarlet fever is a very infectious and dangerous disease and is never so mild that it may not in the long run prove fatal. It is therefore the duty of parents or others in charge of a case to remember that they are responsible for a disease which tends to spread, and to adopt such precautions as will prevent it from doing so. The two words "isolation" and "disinfection" are all important in this and other infectious diseases.

The prolonged warm weather is no doubt responsible for the high death rate among infants, persons aged sixty years and over, and others whose vitality is low. The numbers of deaths of children under one year of age for the month is 607, and of persons 60 years and over, 668, a total of 1,375.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending July 15, 1908, compared with the average for the previous twelve months, the latter in each disease specified is enclosed in brackets: Typhoid fever, 20 (38); measles, 21 (14); Scarlet fever, 36 (34); Whooping cough, 22 (22); diphtheria, 36 (49); malarial fever, 1 (2); tuberculosis of lungs, 265 (296); tuberculosis of other organs, 49 (50); cancer, 130 (123); cerebro-spinal meningitis, 31 (30); diseases of nervous system, 315 (371); diseases of circulatory system, 265 (319); diseases of respiratory system (pneumonia and tuberculosis excepted), 117 (178); pneumonia, 123 (257); infantile diarrhœa, 202 (208); diseases of digestive system (infantile diarrhœa excepted), 187 (196); Bright's disease, 156 (210); suicide, 39 (35); all other diseases or causes of death, 574 (598); total, 2,589 (3,030).

**Food and Drugs.**—During the month ending July 31, 1908, 915 samples of food and drugs were examined in the State Laboratory of Hygiene. Of milk 85 of the 532 samples were below standard as were also 2 of the 8 of ground mustard, 3 of the 16 of ground pepper, 12 of the 53 of cider vinegar, 3 of the 21 of alcohol, 3 of the 23 of hydrogen peroxide, all 4 of tincture of opium. The samples of coffee, cornstarch, cocoa, cream, flour and cream tartar were above standard; 95 samples of water and 12 of kerosene were also examined.

**Bacteriological Department.**—The following specimens for bacteriological diagnosis were examined: From suspected cases of diphtheria, 130; tuberculosis, 259; typhoid fever, 231; malaria, 20; miscellaneous, 17; total, 657.

## OFFICIAL TRANSACTIONS.

**Minutes of the Proceedings of the Medical  
Society of New Jersey at its 142d  
Annual Meeting, Cape May,  
June 18-20, 1998.**

(Continued from page 158.)

## SECOND DAY, FRIDAY, JUNE 18.

## HOUSE OF DELEGATES—AFTERNOON SESSION.

The President, Dr. Edward J. Ill., called the house to order at 3:15 P. M. and announced as the first order of business the report of the Nominating Committee. This report was read by Dr. Harry A. Stout, the secretary of the committee, as follows:

## THE REPORT OF THE NOMINATING COMMITTEE.

The nominating committee met on June 18th at 5 P. M. Dr. Luther M. Halsey was elected chairman and Harry A. Stout, secretary. All of the members present except three of the fellows.

The following nominations were made:

President—DAVID ST. JOHN, Hackensack.

First Vice-President—B. A. WADDINGTON, Salem.

Second Vice-President—THOS. H. MACKENZIE, Trenton.

Third Vice-President—DANIEL STROCK, Camden.

Corresponding Secretary—HARRY A. STOUT, Wenonah.

Recording Secretary—WILLIAM J. CHANDLER, South Orange.

Treasurer—ARCHIBALD MERCER, Newark.

Councilors—First District, THOS. W. HARVEY, Orange; Second District, EDW. F. DENNER, Paterson; Third District, WM. A. CLARK, Trenton; Fourth District, WM. H. ISZARD, Camden; Fifth District, JAS. HUNTER, Westville.

Committee on Publication—CHARLES J. KIPP, Newark; ELLIS W. HEDGES, Plainfield.

Committee on Scientific Work—TALBOT R. CHAMBERS, Jersey City.

Committee on Program—ALEXANDER MCALISTER, Camden.

Committee on Arrangements—DANIEL STROCK, Camden; PAUL MECRAY, Camden; JAS. MECRAY, Cape May; VIRGIL M. D. MARCY, JR., Cape May; ENOCH HOLLINGSHEAD, Pemberton; HARRY A. STOUT, Wenonah; J. MORGAN DIX, Cape May Court House.

Delegates to the American Medical Association—LUTHER M. HALSEY, Williamstown, and FRANK D. GRAY, Jersey City. Alternates—ALEXANDER MCALISTER, Camden; WM. S. LALOR, Trenton, and BRUNO HOOD, Newton.

Delegate to the British Medical Association—DR. ALEX. MARCY, JR., Riverton.

Delegates to the Pennsylvania State Medical Society—HARRY A. STOUT, Wenonah; ALEX. MCALISTER, Camden; J. G. WILSON, Perth Amboy.

Delegates to the Connecticut State Medical Society—THOS. N. MCLEAN, Elizabeth; A. C. HUNT, Metuchen.

Delegate to the Delaware State Medical Society—DR. E. E. DEGROFT, Woodstown.

Delegates to the New York State Medical Society—W. G. SCHEUFFLER, Lakewood; EDWARD GUION, Atlantic City; WM. EDGAR DARNALL, Atlantic City; F. M. DONAHUE, New Brunswick; WILLIAM J. CHANDLER, South Orange.

Delegates to the American Pharmaceutical Association—HENRY L. COIT, Newark; CHAS. L. SCHLICHTER, Elizabeth.

Committee on Legislation—JOHN W. BENNETT, Long Branch; WILLIAM F. RIDGWAY, Atlantic City.

Invitations were presented from Atlantic City, Wildwood and Cape May. The committee recommends Cape May as the place for the next annual meeting and the time of meeting as Wednesday, Thursday and Friday, June 23, 24 and 25, 1909.

Delegates to the American Medical Association were instructed to vote for Chas. J. Kipp for first vice-president at the Atlantic City meeting, June, 1909.

L. M. HALSEY,  
*Chairman.*  
HARRY A. STOUT,  
*Secretary.*

Dr. L. M. Halsey, chairman of the nominating committee, stated that the list of delegates to the different state societies had not yet been completed. The appointment of delegates and of persons to fill other vacancies in the list had been referred to the President and Secretary of the Medical Society of New Jersey, in order to obtain the names of those who would attend the meetings; and Dr. Halsey stated that the Secretary would receive the names of those who desired to attend.

It was moved and seconded that the report be received. Carried.

Dr. T. R. Chambers said that he would like to resign the appointment that had been again so kindly given him upon the Scientific Committee. He felt that he had done his share of this work, and wished that someone else should be put in his place.

Dr. Daniel Strock said he wished to make a remark and a motion. He appreciated the honor conferred upon him by making him chairman of the Committee of Arrangements, a position that he had filled during the past season to the best of his ability. He realized, however, that one member of this committee, being a native of Cape May, was, on account of his previous work, entitled to the honor of being chairman, and therefore made a motion that Dr. P. M. Mecray be made chairman of the Committee on Arrangements. Dr. Strock said that he would consider it a favor if this were done—not that he was unwilling to serve, but because he thought that the Society owed a debt of gratitude to Dr. Mecray, who had labored so earnestly the



year before and had been disappointed by not having the meeting at Cape May in 1907. Dr. Strock thought, therefore, that Dr. Mecray ought to have the honor of conducting the arrangements for the coming meeting at Cape May. The motion was seconded and carried.

*Election of Officers.*—The following officers were nominated: President, David St. John, of Hackensack; First Vice-President, Benjamin A. Waddington, of Salem; Second Vice-President, Thomas H. Mackenzie, of Trenton; Third Vice-President, Daniel Strock, of Camden; Corresponding Secretary, Harry A. Stout, of Wenonah; Recording Secretary, William J. Chandler, of South Orange; Treasurer, Archibald Mercer, of Newark. An opportunity was given for other nominations from the floor, but none were made. In each case it was moved and seconded that the nominations be closed, and that the secretary (or the president, in the secretary's case), be instructed to cast a ballot for the election of the candidate. This was done, and each was declared duly elected.

The following nominations for Councillors were presented: First District, Thomas W. Harvey; Second District, Edward F. Denner; Third District, William A. Clark; Fourth District, William H. Iszard; Fifth District, James Hunter.

Dr. C. J. Kipp made a motion that the names be considered separately, and his motion was seconded. On an aye and nay vote it was declared lost. The vote was questioned. A rising vote was taken and the motion declared carried. The decision of the chair was appealed from, and Dr. Kipp offered to withdraw his motion. It was decided that he could not do this, as it had been voted upon. A motion to reconsider was made, seconded, and carried. The original motion, having again been voted upon, was lost.

*Dr. Walter B. Johnson* made an additional nomination for councillor for the fifth district, presenting the name of Dr. Philip Marvel, of Atlantic City.

*Dr. Philip Marvel* said that he had not the least doubt that Dr. Johnson had only the best of motives in doing this, but he requested the privilege of declining the nomination, and withdrew his name.

It was moved and seconded that the secretary be instructed to cast a ballot for all the nominees. Carried. This was done, and the councillors as nominated by the committee were declared elected.

Drs. Charles J. Kipp and Ellis W. Hedges

were nominated as members of the Committee on Publication. It was moved and seconded that the nominations be closed and that the secretary be instructed to cast a ballot for the election of these gentlemen. This having been done, they were declared elected.

Dr. J. M. Rector was nominated for the place on the Committee on Scientific Work declined by Dr. Chambers, and was duly elected.

Dr. Alexander McAllister was elected to the vacant place on the Committee on Program by a ballot cast by the secretary.

In the same manner the following members of the Committee on Arrangements were elected: Paul M. Mecray, James Mecray, Enoch Hollingshead, Virgil M. D. Marcy, Jr., Harry A. Stout, J. Morgan Dix, and Daniel Strock.

A motion was made that the next meeting of the Medical Society of New Jersey be on Wednesday, Thursday and Friday of the last week of June, viz., June 23rd, 24th and 25th, 1909.

*Dr. T. R. Chambers* said that the experience of the Society had been unfortunate when it had met simultaneously with the American Medical Association in New Jersey. It was very disheartening on such occasions to the Committee on Scientific Work to have made up a good program, only to find but a baker's dozen present to listen to the reading of the papers. He felt, therefore, that he was justified in making a motion that the meeting of the Medical Society of New Jersey, in the years when the American Medical Association meets in this State, shall consist of only one day, for the transaction of the necessary business of the year. The motion was seconded.

*Dr. L. M. Halsey* said that the nominating committee had discussed this matter the preceding evening and they felt that if the meeting were postponed until the last week in June there would be no serious difficulty in securing a fair attendance. The committee thought that there was no reason why the number of days of the session should be lessened.

*Dr. T. R. Chambers* said that there was a good reason why the meeting should be for but one day and that no scientific work should be presented—that the American Medical Association provides a feast of reason and a flow of soul from all parts of the world. From Europe, men come to read carefully prepared papers; and every man in New Jersey should be recommended to go to the meeting of the American Medi-

cal Association when it takes place in New Jersey. The papers read before the Medical Society of New Jersey, while good and worth hearing, cannot compare with those by masters from all over the world. Most doctors are compelled to make a choice between attending the one meeting or the other, and all should have an opportunity to go to the meeting of the American Medical.

*Dr. J. M. Rector* said that it seemed to him that if the gentlemen of New Jersey owed any fealty, it was to the home society and among themselves. As the American Medical Association is to meet early in June, he said, it is likely that the New Jersey Society will not have so good an attendance as it would if the American Medical Association met somewhere else. He hoped, however, that the interest taken by the New Jersey medical men in their Society would still continue and improve, and that the same plan might still be carried on.

*Dr. D. E. English* believed that if only one day's session were held, a quorum could not be obtained. In that case no business could be transacted.

*Dr. H. H. Davis* said that he too felt an interest in the promotion of the medical growth and worth of the Society, and he thought that to subordinate its interests to the simple fact that the meeting of the American Medical Association was to be held in the State during the same month was very unwise. If the Society has any interest at all in the promotion of the welfare and progress of medical work in the State of New Jersey, and if the coming together of its members as a body is of importance to the advancement of the social and scientific aspect of the organization, *Dr. Davis* said that the meeting should not be put aside just because a national organization is to meet within the limits of the State. He said that he is a member of the American Surgical Association, and that the powers that control that organization had deemed it proper to associate it with the American Congress of Physicians and Surgeons, which meets every third year at Washington. The result is that, when this great body meets there, though his association represents men at work along the special lines that had attracted him, it is practically swallowed up in the meeting of the great congress, which makes the program. Thus, the work of the Surgical Association is seriously impaired. He thought, therefore, that the New Jersey Medical Society was of too much importance, if it was worth

anything at all, to abandon the established lines of organized work simply because the American Medical Association was to meet in New Jersey. He considered that the physicians of this State possess enough native ability and vigor, if proper encouragement is given them, to hold a good and satisfactory meeting, in spite of the fact that the American Medical is to meet in New Jersey; and he believed that it would cast a serious reflection upon the Society to call a one day's meeting on account of the fact that such an intellectual treat is to be given. The personal welfare of the State Society, he said, is of too much importance to subordinate it to a meeting of this great national organization. He therefore submitted that it would be detrimental to the Society to take such action. If the members can go to both meetings, they ought to do so. Those that prefer the meeting of the American Medical to that of the State Society have the privilege of attending it; but he asked that the members of the State Society stand shoulder to shoulder and preserve the integrity of their organization.

*Dr. D. C. English* said that he counted it a great privilege and honor to be a Jerseyman; he was born in New Jersey, as were also his father and grandfather; that he lives in New Jersey, and he has the greatest respect for and attachment to the Medical Society of New Jersey and counted it an honor to be a member of it and serve it; it was not only the oldest medical society in the country, but with as grand a record as any. He always when possible attended its meetings, this annual meeting making the thirty-sixth he had attended. He has also been a member of the American Medical Association since 1876 and had attended six annual meetings of that body; he had no hesitation in saying that he had preferred to read the papers of the national body in the Journal, as he did not especially enjoy the great crowds, and he could attend but one of the many sections held at the same hour. He did enjoy and profit by the excellent papers presented and the social features of the annual meetings of our State Society, and decidedly preferred to loyally stand by our Society in maintaining the regular three days' session. Let our members welcome the A. M. A. to New Jersey next year and attend if possible the meetings, but let us also loyally sustain our own Society.

*Dr. F. D. Gray* thought that the objection *Dr. Chambers* had expressed to the fact of two meetings being held in the State in one



year was applicable only when both were held at the same place, which had been a decided misfortune; for usually the last day of the session of the New Jersey Society had lapped over on the beginning of the session of the American Medical Association. Naturally, under these circumstances, the bulk of the members of the State Society had drifted to the other meeting on the last day. He, however, saw no objection, when the two meetings are held apart as to time and place, to the Society's adhering to the ordinary routine.

Question was called for, and the motion of Dr. Chambers was voted down.

The motion to hold the meeting on Wednesday, Thursday and Friday of the last week of June, 1909, was then seconded and carried.

*Dr. Alex. Marcy, Jr.*, made a motion that the place of meeting be the Cape May Hotel. The motion was seconded and carried.

*Dr. W. B. Johnson* made a motion that a vote of thanks be extended to the management of the Cape May Hotel for their courteous treatment. The motion was seconded and carried.

A member suggested to the committee on arrangements that the hotel should be engaged sufficiently long beforehand, so that there might be no difficulty in securing it for the use of our Society at the time fixed upon.

*Dr. Chandler* said that this would undoubtedly be attended to by the chairman of the committee.

*Dr. John W. Bennett*, of Long Branch, and *Dr. William F. Ridgway*, of Atlantic City, were nominated as members of the Committee on Legislation. It was moved and seconded that the nominations be closed, and that the secretary be instructed to cast a ballot for their election. This was done, and they were declared elected.

*Dr. L. M. Halsey*, of Williamstown, and *Dr. Frank D. Gray*, of Jersey City, were nominated as delegates to the American Medical Association, with *Drs. Alexander McAllister*, of Camden; *Bruno Hood*, of Newton, and *William S. Lalor*, of Trenton, as alternates. These nominations were seconded, and the nominees were declared elected, the secretary casting the ballot.

It was moved that all the delegates to other state societies on the list reported by the nominating committee be elected on a ballot cast by the secretary. Seconded and carried.

*Dr. Chandler* asked whether it was to be understood that *Dr. Halsey's* remarks as

presented to the house stating that the President and Secretary of the Society were to fill all vacancies in this list, as well as other vacancies, were approved by the nominating committee and accepted by the Society in accepting the report.

*Dr. Halsey* replied in the affirmative.

*Dr. Strock* called attention to the fact that at the banquet, to be held at 7.30 in the evening, only guests of the hotel were invited; therefore, other persons were not entitled to admission unless paid for. If any such guests were admitted and not paid for by those who had invited them, he thought that the management would probably send the bill to the Society. He thought it proper that the members should know this; because to those desiring to bring friends, the privilege would be extended on these terms. In order to obtain access to the banquet-room, one must wear a badge of the Society. Members should not forget their badges, as they could not be duplicated.

It was asked whether any arrangement had been made for entertaining the gentlemen who had been invited to read papers.

*Dr. Strock* stated that these gentlemen were entitled to entrance to the banquet-room, and that they as well as the speakers to the toasts would attend as the guests of the Society.

*Dr. Frederick F. C. Demarest*, of Passaic, offered a motion that it should in future be stated on the program that the preliminary meetings of the delegates of the various county societies shall take place at 12.30 on the first day of the annual meeting.

*Dr. F. D. Gray* said that he supposed that this meant the caucus for the selection of the member of the nominating committee. He said that the custom had universally been that these meetings should take place immediately after the morning session of the first day, which might end at one or a quarter to one o'clock. He thought that the general sense of the meeting would be carried out by leaving the arrangement as it had been.

*Dr. Demarest* stated that it was for the purpose of preventing the caucuses being held at an indefinite time and in an indefinite way that he had made the motion, as they now are held, or may be held, without the knowledge of a large number of delegates who would wish to attend them.

*Dr. Chandler* asked whether *Dr. Demarest* would be willing to accept the arrangement of *Dr. Gray*.

*Dr. Demarest* said that the motion was

intended to make the time of the meeting a definite one, and not an uncertainty.

*Dr. D. C. English* thought that if the hour were left out, the matter could be arranged satisfactorily, the point being to have it announced on the program that the meeting will occur after the morning session. He himself preferred this because the members, if loyal to the Society, see the announcement on the program and would be in their places. If *Dr. Demarest* had made a motion simply that the notice of the meeting should appear on the program, he would have covered his point.

*Dr. Demarest* said that the announcement was already on the program, but that he had made his motion to secure a definite time for the meeting.

*Dr. Chandler* said that in this case he should be obliged to vote against it, for the reason that, if the caucus were called at 12.30, the room in which the Society is meeting would be emptied at that hour—the members present at that time being largely the delegates and representatives of the various county societies, would be obliged to go out to attend the caucus. It would practically mean a compulsory adjournment of the House of Delegates.

*Dr. Johnson* said that it had long been customary for the delegations to hold their meetings at any time during the morning. If the Society should decide that it is illegal to hold these meetings except after adjournment, then the Society should set a definite time therefore, so that the delegates would have ample notice and could not claim that they had been squeezed out of a meeting. He had no doubt that *Dr. Demarest* would be willing to have the hour changed.

*Dr. Demarest* said that he had assumed that 12.30 was a suitable time, because he thought that the members wanted their luncheon. Provided that there was a definite time set, he would withdraw 12.30 and make it 1 o'clock, if that were more satisfactory.

*Dr. F. D. Gray* offered an amendment that the program should definitely state each year that the meeting of each county delegation shall be immediately after the close of the morning session of the first day. The amendment was seconded.

*Dr. B. D. Evans* said that the way he understood the proposition was that the reason for the offering of the original motion was that the county delegations might definitely understand when they are to convene. Yesterday much inconvenience had arisen

on account of a lack of such information. There was an understanding between the members of his own county as to the time of meeting; but it was such an indefinite and sliding arrangement that after the adjournment of the House of Delegates he had experienced great difficulty in getting the members together. In fact, three or four of them did not come to the meeting at all. *Dr. Evans* said that as these meetings were held for the purpose of selecting a member of the nominating committee, and as the nominations are considered matters of importance, it seemed to him very proper that a definite hour should be selected. To let three or four men select the member of this committee, because the others cannot be found, might cause a misrepresentation of the sentiment of the county society. He therefore thought that a definite hour should be set.

*Dr. Johnson* offered an amendment to the amendment of *Dr. Gray*, that the hour stated on the program be one o'clock P. M. Seconded and carried.

*Dr. Alex. Marcy, Jr.*, offered a resolution that the Medical Society of the State of New Jersey place itself upon record as favoring the establishment of a state institution for the care and treatment of inebriates. He said that this resolution was offered because last year he had made a definite recommendation to the Society that the committee on hygiene and legislation be instructed to prepare a bill and have it presented to the legislature, providing for the establishment of such an institution; and this recommendation had not been acted upon. He felt that it was a very important matter, and therefore brought it again to the attention of the Society at this time.

*Dr. Marcy's* resolution was seconded by *Dr. Johnson*, who moved an amendment that, if adopted, it be referred to the Committee on Legislation.

*Dr. L. M. Halsey* said that the whole matter had been referred by the President to a special committee with power to act or to make suggestions. *Dr. Halsey* had written to this special committee, asking what suggestions they had to make, and had never heard from any of them. Therefore, the legislative committee had taken no action.

*Dr. N. L. Wilson* said that he felt that the state should make its way cautiously in this matter; as several state institutions were continually asking for more money, and the revenues were being greatly reduced. He thought that there was enough taxation al-



ready, and believed that it would be better to wait and see how the institutions already established were getting on.

*Dr. D. C. English* asked the names of the members of the special committee appointed to attend to the matter mentioned by *Dr. Marcy*.

*Dr. H. H. Davis* said that he recollected *Dr. Marcy's* paper very well and was in accord with its ideas. He had been looking around to see what could be done, and on more than one occasion had had a controversy with the Commissioner of Charities upon the subject. It was largely through the persuasion of the Commissioner of Charities that such a bill was not offered to the legislature. *Dr. Davis* had also had a talk with the present Governor of New Jersey, who had informed him of the condition of the State's finances, and said that to introduce such a bill at that time would be to do a lot of work without any result. The Commissioner of Charities had promised that if the bill were brought up at any time when the finances of the State were in condition to have it passed, he would give it his support.

*Dr. B. D. Evans* said that he felt a definite interest in the matter since into the hospital over which he presides a considerable number of patients are committed because of insanity due to excessive indulgence in alcohol. They are insane when committed but after being in the wards for a short time they are, through judicious treatment and the ordinary processes of elimination, relieved of the immediate effects of alcohol; their hallucinations and delusions disappear and they seem to be normal.

Under the laws of the State of New Jersey these patients so improved must be discharged; often they get drunk before reaching their homes and at once become a menace to society and a danger to their families. Their habits and mental attitude prevent their wives and children from being bread-earners and constitute one of the most threatening dangers with which society has to contend.

*Dr. White* has remarked "that a drunk should be put in jail." *Dr. Evans* said that perhaps he ought, but that other people who had given the subject serious consideration thought differently, and considering the fact that a large percentage of inebriates are the natural outcome of a bad heredity and exhibit a psychopathic constitution with extreme susceptibility to the effects of alcohol, good government, the protection of

society and the laws of humanity demand that such people should be cared for humanely and scientifically treated rather than subjected to incarceration in jail and punishment. It costs as much to support such persons in jail and in insane asylums as it would in an institution provided and equipped especially for them, where they could be cared for properly, scientifically and intelligently as they should be.

In regard to the matter of the Society's supporting the principles of providing a special means for the care of inebriates, he thought it was all right. The State Medical Society should, by its recommendations and endorsement, place the responsibility upon the Legislature and executive bodies of the State. The Society could not be expected, he said, to furnish the funds, but he thought it was proper and in good order that the Society as a body should subscribe to the principles involved in the proper care of this class and not refer that part of the matter to a committee. Reference to a committee in many instances means the death of important resolutions. It has so resulted in previous years, not on account of a lack of interest, but because one thing and another prevented action. Even if the Legislature does not aid in the project, the Society will have done its full duty by going on record in favor of it.

*Dr. D. C. English* made the suggestion that the Society appoint the committee and refer the resolution to it.

*Dr. N. L. Wilson* made a motion that the whole question be referred to a committee which shall confer with the Commissioner of Dependency and Crime. He thought that if these gentlemen would get together, the whole question would be settled.

*Dr. English* withdrew his motion. *Dr. Wilson's* was seconded.

*Dr. Marcy* said that he would accept this amendment and it was carried.

*Dr. Evans* asked whether he understood correctly that the Society subscribed to the principles. He wished to know whether or not this had been intended in *Dr. Wilson's* motion.

*Dr. Wilson* restated his motion.

*Dr. Marcy* said that he would not accept that as an amendment to his resolution, and still offered the resolution, which he had not withdrawn, and which had not yet been voted on. He read his resolution again, and remarked that he had not said where or how the institution was to be established but merely that the Society placed itself on record as favoring its establishment.

*Dr. Gray* seconded the resolution which he said he would amend by asking that it be referred to a special committee appointed by the President to confer with the commission of dependency and crime.

*Dr. Marcy* said that he would accept this amendment.

*Dr. Johnson* said that he had offered an amendment, duly seconded, that the resolution be approved and be referred to the committee on legislation, who could confer with any other committee. If the Society were to approve of it and refer it to a special committee, the legislative committee would not take cognizance of it and the other committee would pay no attention to it either.

*Dr. English* asked whether *Dr. Wilson's* motion had not been put and carried.

*Dr. Marcy* said that he would renew his resolution, which he again read.

*Dr. English* made a motion that it be adopted, which was seconded.

*Dr. Gray* asked whether the proper way to do would not be to reconsider the motion of *Dr. Wilson* that had been passed.

After considerable discussion *Dr. Wilson's* resolution was reconsidered and the chair ruled that *Dr. Marcy's* resolution with *Dr. Johnson's* amendment was before the house. This was put to a vote and adopted.

*Dr. Chandler* said that he had been requested by *Dr. Guion* to offer a resolution to protect the privacy of communications between physicians and patients. He then read the following resolution:

Resolved, That the committee on legislation use every effort to secure a legislative enactment protecting communications between physician and patient as well as information which may have been obtained by a physician from his patient while attending him or her in a professional character; and that said committee be assisted by local committees to be appointed by the President; said local committees to consist of three members of this Society from each county in the state.

*Dr. Guion* had also prepared the following comments:

The law of England, which is the common law of New Jersey, did not recognize communications between physician and patient as privileged and without legislative enactment such communications are not privileged in New Jersey or in any other state. But New York in 1828 enacted a statute establishing the privilege and more than half the states have followed the example of New York.

The ground on which the commissioners of revision of statutes in New York acted is set forth as follows: "The ground on which communications to counsel are privileged is the supposed necessity of a full knowledge of the facts, to advise correctly, and to prepare for the proper defence or prosecution of the suit. But surely the necessity of consulting a medical adviser, when life itself may be in jeopardy is still stronger. And unless such consultations are privileged, men will be incidentally punished by being obliged to suffer the consequences of injuries without relief from the medical art and without conviction of any offense. Besides in such cases during the struggle between legal duty on the one hand and professional honor on the other, the latter, aided by a strong sense of the injustice and inhumanity of the rule, will, in most cases, furnish a temptation to the perversion or concealment of truth too strong for human resistance."

Among the states in which statutes have been enacted are California, Colorado, Indiana, Iowa, Kansas, Michigan, Missouri, Montana, New York, Pennsylvania and Wisconsin.

It was moved and seconded that the resolution be adopted. Carried.

*Dr. Halsey* stated that at the legislative conference a communication had been received from the dependency and crimes commission, and the committee on legislation had decided to ask the Society to appoint a committee to act in combination with this commission. They felt that the whole matter should be referred to the legislative committee or to a committee especially appointed, as many interesting questions of vital importance to the Society would probably grow up. The commission, he said, is collecting a great many data, and he thought the matter should be attended to.

It was moved and seconded that the matter be referred to the legislative committee. Carried.

*Dr. Thomas W. Harvey* said that it might be worth while for the Society to consider whether it should be represented at the Tuberculosis Congress to be held at Washington in September and October, as all kinds of medical and scientific societies had been asked to send delegates, and he thought that the Medical Society of New Jersey should be represented.

*Dr. Chandler* said that he understood that a committee had been appointed to name delegates to represent the Medical So-



ciety of New Jersey at the meetings of any medical bodies.

*Dr. Harvey* said that he had a report from the Judicial Council that he wished to present. He then read this report, which was as follows:

REPORT OF THE JUDICIAL COUNCIL IN THE  
MATTER OF DR. H. D. MARCUS.

Cape May City, N. J., June 19, 1908.

*To the President and Members of the Medical Society of New Jersey:*

The judicial council would respectfully report that during the course of this meeting they have considered the case of Dr. H. D. Marcus, of Atlantic City vs. Atlantic County component society. This matter was referred to the council by the secretary of the Medical Society of New Jersey, to whom Dr. Marcus had made complaint. Dr. Marcus claimed that he had been unjustly refused admission to the Atlantic Society, and that this was due to personal reasons and not to unprofessional or unethical conduct. The council summoned before them Dr. Marcus and the officers of the Atlantic County society. No evidence was produced that any specific charges against Dr. Marcus had been presented to the Atlantic County society. It only appeared from the minutes of the Atlantic County society that Dr. Marcus failed of an election because he did not receive enough votes to be elected. However, it became very apparent that this matter of Dr. Marcus is another phase of the state of discord and personal disagreement that is at present existing in Atlantic County, and it makes so much more necessary the adjudications of the whole matter by the Board of Trustees, to whom this matter has been referred. Unfortunately there was not a full attendance of the councilors at the meeting. Dr. Marvel asked to be relieved from acting as chairman, but in order to make a quorum he was requested to sit with the council and take part in its proceedings which he reluctantly did. The council have referred Dr. Marcus' claims for admission to membership back to the Atlantic County society, hoping that in the meantime the Board of Trustees may so adjust matters in that society that his claim may be considered in an impartial and judicial manner.

Respectfully submitted,

Signed P. MARVEL,

W. H. ISZARD,

T. W. HARVEY.

It was moved and seconded that the report be received. Carried.

*Dr. Halsey* referred to the subject of the child-labor law, and said that the committee on legislation felt that it was a matter of so much importance that it could not be decided at once. He therefore requested that the report upon it should be put off until the next annual meeting, so that the question could be considered carefully by the committee during the interval.

The President suggested that some action should be instituted at the next session of the legislature and a report thereon made at the next annual meeting.

It was moved, seconded and carried that a telegram of sympathy be sent by the secretary to Dr. William Elmer, of Trenton, who was ill at Atlantic City; also that a similar telegram be sent to Dr. Elias J. Marsh, of Paterson.

The House adjourned at 4.30 P. M.

THIRD DAY, SATURDAY, JUNE 20.

MEETING OF THE HOUSE OF DELEGATES.

*Dr. Chandler* presented the resignation of Dr. Daniel Strock as a permanent delegate from Camden County, and moved that it be accepted. The motion was seconded and carried.

*Dr. Chandler* made a motion that a vote of thanks be offered to the Cape May County Medical Society, and to Dr. Anna M. Hand and Mrs. Lizzie M. Brockius for their efforts in contributing to the entertainment of the members of the Medical Society of New Jersey and its guests. Seconded and carried.

*Dr. Chandler* reported that there had been present at the meeting thirteen fellows, seven officers, one honorary member, sixty permanent delegates, forty-three annual delegates, eighty-three associate delegates, and nearly two hundred guests, making a total of four hundred and three. The attendance of delegates and members was somewhat less than that of former years, but the number of guests was unusually large.

*Dr. D. C. English* announced that all the trustees but three were present, two of the absent ones having been detained at home by reason of serious illness.

Dr. Ill expressed his thanks for the great kindness and courtesy shown him during his term as presiding officer.

Adjourned at 1 P. M.

The following persons whose names are recorded in the registration book were present:

FELLOWS—Charles J. Kipp, Chairman, Newark; David C. English, Secretary, New Brunswick; John W. Ward, Trenton; H. Genet Taylor, Cam-

den; John G. Ryerson, Boonton; Obadiah H. Sproul, Flemington; Thomas J. Smith, Bridgeton; Claudius R. P. Fisher, Bound Brook; Luther M. Halsey, Williamstown; John D. McGill, Jersey City; Edmund L. B. Godfrey, Camden; Henry Mitchell, Asbury Park; Walter B. Johnson, Paterson, Alexander Marcy, Jr., Riverton.

OFFICERS—Edward J. Ill, President, Newark; David St. John First Vice-President, Hackensack; Benjamin A. Waddington, Second Vice-President, Salem; Thomas H. Mackenzie, Third Vice-President, Trenton; Daniel Strock, Corresponding Secretary, Camden; William J. Chandler, Recording Secretary, South Orange; Archibald Mercer, Treasurer, Newark.

#### PERMANENT DELEGATES.

Atlantic County—W. Blair Stewart, Edward A. Reiley, W. Edgar Darnall, Elisha C. Chew, and Emery Marvel, Atlantic City.

Bergen County—Henry C. Neer, Park Ridge; David St. John, Hackensack, and Samuel E. Armstrong, Rutherford.

Burlington County—Enoch Hollingshead, Pemberton, and Walter E. Hall, Burlington.

Camden County—Duncan W. Blake, Gloucester; Daniel Strock, William H. Iszard, William A. Davis, Alexander McAlister, William S. Jones, Harry H. Sherk, and John F. Leavitt, Camden.

Cape May County—Randolph Marshall, Tuckahoe.

Cumberland County—S. Thomas Day, Port Norris, and Ellsmore Stites, Bridgeton.

Essex County—William J. Chandler, South Orange; Edward J. Ill, Newark; Richard C. Newton, Montclair; James T. Wrightson, Newark; Thomas W. Harvey, Orange; David E. English, Milburn; George B. Phillhower, Nutley; Henry L. Coit, Theodore W. Corwin, Richard G. P. Dieffenbach, Edward Staehlin, and Livingston S. Hinckley, Newark.

Gloucester County—George E. Reading, Woodbury; James Hunter, Jr., Westville, Eugene T. Oliphant, Bridgeton.

Hudson County—James A. Exton, Arlington; Joseph M. Rector, Jersey City; Fred M. Corwin, Bayonne; Mortimer Lampson, Talbot R. Chambers, Gordon K. Dickinson, and Frank D. Gray, Jersey City.

Mercer County—Elmer Barwis, Thomas H. Mackenzie, Charles F. Adams, John C. Felty, and Henry B. Costill, Trenton; and George H. Franklin, Hightstown.

Monmouth County—Henry Mitchell, Asbury Park.

Morris County—James Douglass, Stephen Pierson, Morristown; Frederick W. Flagge, Rockaway; Calvin Anderson, Madison, Britton D. Evans, Morris Plains.

Ocean County—W. G. Schaufler, Lakewood.

Passaic County—F. F. C. Demarest, Passaic; Charles H. Scribner, Robert M. Curtis, and Edward F. Denner, Paterson.

Salem County—Benjamin A. Waddington, Salem; William H. James, Pennsville, and Henry Chavanne, Salem.

Somerset County—John P. Hecht, Somerville.

Union County—Alonzo Pettit, Norton L. Wilson, Thomas N. McLean, and Edgar B. Grier, Elizabeth.

Warren County—J. M. Reese.

#### ANNUAL DELEGATES AND REPORTERS.

W. G. Schaufler, Lakewood; H. H. Davis, Camden; A. A. Strasser, Arlington; J. D. Lip-

pincott, Newark; T. Senseman, Atlantic City; T. R. Paganelli, Hoboken; W. S. Lalor, Trenton; L. L. Mial, Morristown; J. V. Bergin, Neer, Paterson; B. Hood, Newton; V. Ruch, Jr., Neer, Paterson; B. Hood, Newton; V. Rush, Jr., Englewood; P. H. Markley, Camden; H. A. Stout, Wenonah; E. S. Sharpe, A. E. Ewens, Atlantic City; H. G. Miller, Millville; M. K. Mines, Camden; F. S. Grim, Baptisttown; I. E. Charlesworth, Bridgetown; J. B. Wintersteen, Moorestown; E. J. Haines, Medford; J. W. Bennett, Long Branch; J. F. Smith, Salem; J. M. Dix, Cape May; E. E. DeGroff, Woodstown; R. Jones, Toms River; G. M. Culver, Jersey City; T. S. Dedrick, Washington; A. Stern, J. P. Reilly, Elizabeth; I. S. Long, Freehold; T. N. Gray, East Orange; W. W. Brooke, Bayonne; F. W. Pinneo, Newark; J. C. McCoy, Paterson; J. H. Moore, Bridgetown; H. R. Livengood, Elizabeth; W. L. Pyle, Jersey City; H. G. Norton, Trenton; H. A. Wilson, Woodbury; W. P. Melcher, Mount Holly, and J. C. Craythorn, Trenton.

#### ASSOCIATE DELEGATES.

W. A. Wescott, Berlin; C. W. Harreys, Ridgewood; E. G. Edwards, Williamstown; W. K. Newton, Paterson; A. E. Carpenter, Boonton; J. Mecray, Cape May; M. J. Synnott, Montclair; W. F. Ridgway, Atlantic City; W. J. Arlitz, Hoboken; R. M. Davis, Salem; J. L. Taylor, Boonton; W. H. Carpenter, Salem; D. T. Bowden, Paterson; J. W. Wade, Millville; V. M. D. Marcy, Cape May; S. F. Ashcraft, Mullica Hill; A. Lippincott, Camden; C. W. Wilson, Vineland; P. Marvel, Atlantic City; S. E. Ewing, Cape May; F. E. Agnew, Paterson; W. E. Ramsay, Perth Amboy; A. C. Hunt, Metuchen; J. J. Mooney, Jersey City; A. M. Hand, Cape May; A. L. LeFevre, Blackwood; C. A. Rosenwasser, Newark; E. J. Marsh, Jr., Paterson; W. Buermann, Newark; W. H. Shipp, Bordentown; C. B. Smith, Washington; F. Devlin, Newark; F. J. Keller, Paterson; J. M. Maghee, West Orange; J. C. Farr, Jr., Hoboken; G. B. Gale, Newark; C. H. Schlichter, Elizabeth; J. S. Brown, Montclair; G. L. Romine, Lambertville; E. Physick, Cape May; A. L. Leach, Cape May; E. Guion, Atlantic City; P. D. Bunting, Elizabeth; G. C. Laws, Paulsboro; L. H. Shenier, Weehawken; W. B. Jennings, Haddonfield; S. B. English, Glen Gardner; A. G. McCausland, Camden; M. W. Newcomb, Burlington; G. M. Laws, Philadelphia; F. G. Stroud, Moorestown; H. F. Palm, Camden; J. A. Chard, Jersey City; H. D. McCormick, Newark; F. V. Ward, Millville; A. J. Mander, Millville; J. J. Broderick, Jersey City; E. G. Hummel, Camden; J. S. Douglas, Cape May; H. H. Tomlin, Wildwood; C. F. Fisher, Clayton; C. S. Heritage, Glassboro; J. M. Craig, Lakewood; W. C. Parry, Hainesport; G. W. Fitch, Daretown; W. S. Ewen, Alloway; E. M. Richardson, S. Presley, J. W. Fithian, Camden; E. Way, Dennisville; J. H. Underwood, Woodbury; J. W. Martindale, Camden; L. Emerson, Orange; M. M. Winton, East Orange; J. S. Baer, Camden; T. P. Prout, Summit; G. T. Tracy, Beverly; S. M. Wilson, Bridgeton; G. Garbrant, Atlantic City; E. S. Corson, Bridgeport; E. C. Pechin, Camden.

#### GUESTS.

Maurice H. Richardson, Boston; Brandreth Symonds, New York; Hobart A. Hare, Philadelphia; Hon. Joseph S. Frelinghuysen, Raritan; Ellsworth Eliot, Jr., New York; Alfred A. Woodhull, Princeton; Wm. M. Leszynsky, New



York; D. M. Stout, Berlin; Wm. H. McIlhaney, Easton; S. Lewis Ziegler, Philadelphia; S. MacEwen Smith, Philadelphia; R. C. Norris, Philadelphia; G. W. Drake, Hollins, Va. There were also present the wives and families of many of the physicians attending the meeting.

The following permanent delegates were absent:

Atlantic County—J. Addison Joy, Atlantic City.  
Burlington County—Richard H. Parsons, Mt. Holly.

Cumberland County — Joseph Tomlinson, Bridgeton.

Essex County—Charles Young, Joseph C. Young, Herman C. Bleyle, George R. Kent, Joshua W. Read, George A. Van Wagenan, Theron Y. Sutphen, Charles F. Underwood, L. Eugene Hollister, Charles D. Bennett, and Robert G. Stanwood, Newark; Thomas S. P. Fitch, Orange; William B. Graves, East Orange, and Richard P. Francis, Montclair.

Hudson County—George E. McLaughlin, Samuel A. Helfer, and John C. Parsons, Jersey City.

Hunterdon County—Isaac S. Cramer, Flemington; William S. Creveling, Valley, and George N. Best, Rosemont.

Mercer County—Richard R. Rogers, Sr., and David Warman, Trenton.

Middlesex County—Ambrose Treganowan, South Amboy, and Frank M. Donahue, New Brunswick.

Monmouth County—D. McLean Forman, Freehold; Edwin Field, Red Bank; Franklin C. Price, Imlaystown; Samuel Johnson, Asbury Park, and Cyrus Knecht, Matawan.

Morris County—Levi Farrow, Hackettstown. Cuthbert Wigg, Boonton, and Alfred A. Lewis, Morristown.

Passaic County—Philander A. Harris, George H. Balleray, John L. Leal, John T. Gilson, and Andrew F. McBride, Paterson.

Somerset County—Sewell O. B. Taylor, Millstone; Aaron L. Stillwell and Mary E. Gaston, Somerville.

Sussex County—Benjamin W. Ferguson, Beemerville.

Union County—Elihu B. Silvers, Rahway; J. Ackerman Coles, Scotch Plains; Thomas H. Tomlinson, Plainfield, and James S. Green, Elizabeth.

Warren County—G. Wyckoff Cummins, Belvidere.

The following permanent delegates have been absent from two consecutive annual meetings: Herman C. Bleyle, Newark; Richard P. Francis, Montclair; J. Ackerman Coles, Scotch Plains, and G. Wyckoff Cummins, Belvidere.

WM. J. CHANDLER,

*Secretary.*

## SCIENTIFIC SESSIONS.

### FIRST DAY, THURSDAY, JUNE 18.

#### GENERAL MEETING—AFTERNOON SESSION.

The Scientific Session was opened at 4:45 P. M., with the Oration in Medicine, delivered by Dr. William K. Newton, of Paterson. It was moved and seconded that the oration be received and be published in the Journal of the Society. Carried.

A paper on "Endothelioma of the Pleura"

was read by Dr. Henry S. Patterson, of New York, and was discussed by Drs. Philip Marvel, Chas. A. Rosenwasser, and Norton L. Wilson. The discussion was closed by the author.

The "Diagnostic Importance of Vomiting in Childhood" was the title of the paper read by Dr. Arthur Stern, of Elizabeth. It was discussed by Drs. H. L. Coit, P. DuBois Bunting, J. P. Reilly, D. E. English, and N. L. Wilson.

Dr. Alexander McAlister read a paper on "The Present Status of the Milk Problem," which was discussed by Drs. Coit, Rosenwasser, and Chavanne.

The adjournment for the afternoon took place at 6:30 o'clock.

### FIRST DAY, THURSDAY, JUNE 18.

#### GENERAL MEETING—EVENING SESSION.

The evening session was called to order at 8:45.

The annual address of the President, on "Medical Expert Testimony," was read by Dr. Edward J. Ill. A motion that the thanks of the Society be expressed to Dr. Ill for his address, and that it be published in the Journal, was made, seconded, and carried.

The Oration in Surgery, entitled, "When Shall the Physician Distrust His Own Judgment in Surgical Matters," was delivered by Dr. Maurice H. Richardson, of Boston. It was moved and seconded that a vote of thanks be tendered to Dr. Richardson for his able and instructive paper. Carried.

"The Influence of Overweight and Underweight on Vitality" was the title of the paper read by Dr. Brandreth Symonds, of New York. It was discussed by Drs. R. C. Newton and Alfred A. Woodhull.

Report of a "Case of Excision of the Stomach for Carcinoma," read by Dr. Edward Staehlin, of Newark, was discussed by Drs. J. P. Reilly and J. W. Wrightson. Dr. Staehlin closed the discussion.

"Tetanus; its Prevention and Treatment." This paper was read by Dr. J. Harris Underwood, and discussed by Drs. Geo. E. Reading, J. H. Bradshaw and J. W. Wrightson.

Adjourned at 11:30 P. M.

### SECOND DAY, FRIDAY, JUNE 19.

#### GENERAL MEETING—MORNING SESSION.

This session opened at 10:45 A. M. with the annual address by the Third Vice-President, Dr. Thomas H. Mackenzie, of Tren-

ton. His subject was, "A Brief Review of Hernia, as understood and treated at different epochs by the past and present masters of surgery."

The next paper, on "Acute Intestinal Obstruction," was read by Dr. Robert M. Curts, Paterson. The discussion was opened by Dr. T. W. Harvey, Orange, and closed by Dr. Curts.

Dr. Ellsworth Eliot, Jr., of New York, read a paper on "Clinical Features and Treatment of Acute Perforating Gastric and Duodenal Ulcer." The discussion was opened by Drs. Gordon K. Dickinson, Jersey City, and James S. Brown, Montclair. Drs. Harvey, Gray, and Ill took part in the discussion, which Dr. Eliot closed.

The President announced the names of the committee authorized by Dr. English's resolutions concerning the Lanning bill and the State Board of Health, as follows: Drs. David C. English, Frank D. Gray, Alexander Marcy, Jr., Walter B. Johnson, and Luther M. Halsey.

The next paper, on "Remote Pain Following Abdominal Operations," was read by William E. Darnall, Atlantic City. The discussion was opened by Dr. Elmore Stites, Bridgeton. Dr. Darnall closed the regular discussion, but he was followed by Drs. Ill and Gray, who continued the discussion.

Dr. John P. Reilly, of Elizabeth, read a paper on "Reflex Gastric Symptoms a Factor in Surgical Disease of the Abdomen." The discussion was opened by Dr. Gray, who was followed by Dr. Emery Marvel.

The session adjourned at 12:45, noon.

## SECOND DAY—FRIDAY, JUNE 19.

### GENERAL MEETING—AFTERNOON SESSION.

This session opened at 4.30 P. M.

"Acute Anterior Poliomyelitis, with Special Reference to the Recent Epidemic," was the title of the first paper, presented by Dr. David T. Bowden, of Paterson. It was discussed by Drs. F. D. Gray, D. E. English, T. P. Prout, M. J. Synnott, W. M. Leszynsky, J. E. Edward, and closed by Dr. Bowden.

"The Importance of Studying the Conditions of the Heart Muscle in Various Diseases" was presented by Dr. Hobart A. Hare, of Philadelphia, and discussed by Drs. P. Marvel, M. J. Synnott, A. Marcy, Jr., Dr. Hare closing.

The next paper was entitled "Observations on Bronchial Asthma," by J. Hervey

Buchanan, M. D., of Plainfield. In his absence it was read by title.

"The Psychic Element in Medical Practice" was the title of the paper read by Dr. Linn Emerson, of Orange, and was discussed by Drs. T. N. Gray, W. M. Leszynsky, C. A. Rosenwasser, W. G. Schaufler, T. P. Prout, and H. C. Neer, by Emerson closing.

The paper by Dr. Harry A. Cossitt, of Morris Plains, was read by title.

Adjourned at 6 P. M.

## THIRD DAY, SATURDAY, JUNE 20.

### GENERAL MEETING—MORNING SESSION.

The Society was called to order at 10 A. M. The first paper, entitled "A Resume of Modern Methods of Treatment for Posterior Displacements of the Uterus," was read by Dr. J. Watson Martindale, Camden. The discussion was opened by Edward Staehlin, Newark, and was continued by Drs. Ill, Gray, Rector, Chavanne, Harvey, Marvel, Drake, Reilly, and Morris, Dr. Martindale closing.

The next paper, "The Therapeutic Application of Dry Hot Air," by Dr. Elton S. Corson, Bridgeton, was read by title.

Dr. Charles A. Rosenwasser, Newark, read a paper, entitled, "The Drink Habit and Its Treatment." The discussion was opened by Drs. Livingston S. Hinckley, Newark, and Alex. Marcy, Jr., Riverton, and was continued by Drs. Drake, and D. E. English, Dr. Rosenwasser closing.

"Incidence of Hydatid Disease in North America, with Report of Three Cases," by Dr. G. N. J. Sommer, Trenton, was read by title.

The Scientific Sessions adjourned at 12.30 (noon) and the meeting of the House of Delegates followed.

*Abstract of the Minutes of the Scientific Sessions of the 142nd Annual Meeting of the Medical Society of New Jersey, held in Cape May on June 18th, 19th and 20th, 1908.*

*Thursday, June 18, 4.30 P. M.*

The first paper was the *Oration in Medicine*, which was delivered by Dr. Wm. K. Newton, of Paterson.

The title of Dr. Newton's oration was "*Joint Affections in Children Caused by Infectious Diseases.*" He gave two reasons for the ignorance of the general practitioner regarding infectious arthritis, and



for the lack of fullness and definiteness in the literature upon this subject: the custom of calling all cases of arthritis rheumatism, and the attempt to group all these joint affections under the title of Still's disease. Infectious arthritis, he said, may be the result of any of the infections with pus-producing organisms. He excluded those caused by tuberculosis, syphilis, and acute rheumatic fever; and confined his attention to the less understood cases of infectious arthritis, considering their etiology, pathology and symptoms.

ENDOTHELIOMA OF THE PLEURA.—By  
*Dr. Henry S. Patterson, New York.*

This paper gave a review of the literature of the subject, including ninety-six cases. Malignant new growth of the pleura should be suspected when bloody fluid is found in the chest. A number of conditions must be excluded in making the diagnosis, particularly tuberculosis, aneurysm, and primary new growth elsewhere. Persistent bloody fluid, not tuberculous, with progressive emaciation, usually accompanied with fever, makes up a suggestive picture. Sometimes cells are found in the fluid. The only absolutely sure method of diagnosis, however, is by making a microscopic examination of tissue that has come to the surface by extension of metastasis. The disease must be treated at first by aspiration. The skin may be sprayed with ethyl chloride, care being taken to allow the frost to wear off before puncturing. Otherwise, the needle will have to go through a tough, leathery layer and run the chance of bending or breaking. The subsequent pain is relieved by local applications and by the coal-tar products, with or without morphine. In the last stages, morphia to the point of toxic effects is indicated. Symptoms referable to metastasis must be treated as they arise. The only justification for surgical treatment is the presence of a purulent effusion.

*Dr. Philip Marvel*, of Atlantic City, asked whether the malignant growths of the pleural cavity are more liable to metastases than are similar tumors elsewhere.

*Dr. Charles A. Rosenwasser*, of Newark, thought it important to do all that can be done to afford relief in cases pronounced inoperable, and asked whether Dr. Patterson's experience with methylene blue in cases of inoperable sarcoma had been that the patients had been made more comfortable by its use, and whether life had been prolonged.

*Dr. N. L. Wilson*, of Elizabeth, said that in sarcoma of the antrum he thought it better to let the tumor alone and simply keep the patient under the influence of an opiate.

*Dr. Patterson*, closing, said that this case was the ninth that has appeared on record in the literature of this country. He would himself never have been able to recognize the condition in this case, had it not been for an article of Dr. Delafield's reporting similar cases. The diagnosis thus made was confirmed at autopsy.

Theoretically, he said, one would imagine that the pleura, being so rich in lymphatic drainage, would form a primary site from which metastases would be very frequent and extensive; but, on the contrary, the cases in which metastases were mentioned represented only about twenty per cent. of the total.

He had had no experience with the use of methylene blue in this class of cases; and he stated that his reference to malignant growths of the antrum was not in relation to operative interference, but simply as one of the means of eliminating primary growths elsewhere than in the pleura.

*Diagnostic Importance of Vomiting in Childhood.*—By *Dr. Arthur Stern, Elizabeth.* Synopsis. Cerebral vomiting, gastroenteric and peritoneal vomiting, prodromal and initial vomiting in acute infections, vomiting in intoxications, vomiting after excitement, vomiting in cardiac insufficiency, vomiting in cases of general neuropathy, and vomiting from miscellaneous causes. Discussion was opened by Drs. Henry L. Coit, Newark, and P. DuB. Bunting, Elizabeth.

*Dr. Coit* commended the courage of Dr. Stern in bringing before the Society such a common subject as vomiting, and said that it seems to be the tendency of the general practitioner to ascribe all manifestations of disease to remote causes, the research laboratory being called in to answer all questions of importance. Dr. Coit thought that all the papers should not come from the research laboratory or the experiment station. The importance of vomiting has, he stated, been much magnified, and incorrect diagnoses have been made from it. He called attention to three classes of diseases in which vomiting is a common symptom. Cyclic, or recurrent, vomiting he did not consider so frequent as is believed. He had seen cases in which this diagnosis had been made, but in which a good dose of calomel

with a regulated diet and possibly some subsequent intestinal antisepsis had cleared up the condition. With congenital pyloric stenosis, a term that one is apt to apply to persistent vomiting in infants, has been grouped another disease known as pyloric spasm. Dr. Coit thought that many cases deemed suitable for operation, because believed to be congenital pyloric stenosis, had been produced by the use of boric acid solution. Vomiting is a symptom of so many diseases that it has very little diagnostic value when isolated from other symptoms.

Dr. Bunting stated that in the boroughs of Manhattan and the Bronx, the lives of twelve thousand children are saved annually through the recognition of the diagnostic importance of vomiting in children. It is not a disease, but a symptom, and must be considered in connection with the other symptoms present. When it is a prominent symptom, the physician is likely to direct his thought to the stomach; but before looking at that organ for the cause of the vomiting, everything else that might produce it should be eliminated.

Dr. J. P. Reilly, of Elizabeth, said that he would mention only the class of cases in children in which there are periodic attacks of vomiting, but in which no definite lesion is discoverable. If, on close observation during one of these attacks, the physician's hand be placed over McBurney's point, he will gain the reputation of being able to diagnose appendicitis in infants.

Dr. D. E. English, of Milburn, said that chills, fever, and vomiting are usually considered the three important initial symptoms of scarlet fever; but that of five hundred cases in which this diagnosis was made, initial vomiting was present in less than fifty per cent. He believed that many of the cases called cyclic vomiting are simply migraine in the infant. In many cases, calomel alone will relieve the condition; but he has been giving this drug in combination with sodium, with better results than when the calomel was used alone. He has also followed the suggestion of Dr. Coit in regard to dropping the use of boric-acid solution in the nursery.

Dr. Wilson believed that most of the cases of vomiting in children afflicted with adenoids are due to the vitiated and increased secretions going down the back of the pharynx, rather than to the mere presence of the adenoid or the hypertrophied tonsil.

*Present Status of the Milk Problem.*—By Dr. Alexander McAllister, Camden.

Dr. McAllister said that his paper had been written with the object of urging the use of only ideal whole milk for the very young and delicate. Simple methods of dilution or modification, possible in any household, yield superior results, because of the greater ease with which fresh whole milk can be digested. In every market this ideal whole milk may be obtained for the price of the searching for it; and the market that falls short in this respect cannot be shown up too early or too relentlessly.

Dr. Coit said that the movement for pure milk in the United States is supposed to have had its origin in the Medical Society of New Jersey at a meeting in 1889. It has grown to such proportions that an attempt is now being made to get medical milk, as distinguished from municipal milk. The Government distinguishes three varieties: certified milk, municipal or inspected milk, and other milk. The last should always be cooked and not simply pasteurized.

Dr. Rosenwasser stated that it had been ascertained by the dependency and crime commission that feeding with impure milk in infancy produces dependency in later life, and remarked that in this commission the Medical Society of New Jersey may, at the expense of the State of New Jersey, find a means to carry out investigations and to save the lives of babies and keep them in good health.

Dr. Henry Chavanne, of Salem, said that the cow is now legislated in New Jersey to a standard that is impossible, except with thoroughbreds; and that not a dairy in the state is allowed to send to market milk that cannot reach this standard. As no cows except thoroughbreds will produce milk of this standard naturally, the animals are fed on an artificial diet that stimulates them to the highest point of secretion. This results in a sacrifice of the proteids of the natural economy, so that not five per cent. of the cows in New Jersey can raise their own offspring without producing in them diarrhea. If the milk of a cow will not nourish its own calf, it is impossible for the more delicate organism of the child to be sustained by it.

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*Thursday, June 18th, Evening Session.*

ANNUAL ADDRESS BY THE PRESIDENT.

*Medical Expert Testimony.*—Dr. Edward J. Ill, Newark.

Dr. Ill expressed regret that the Governor of New Jersey had seen fit to appoint but



one medical man on the State Board of Health, this one being a retired physician. He stated that the Society is working under a disadvantage, owing to a lack of competent legal advice, and suggested that it engage such counsel to defend the members in malpractice suits and do other necessary legal work. He thought that damage-suit expenses should be paid by the Society, because the accused practitioner is defending not only himself, but every physician in the state.

The difference between an ordinary and an expert witness, he said, is that one simply states a fact and the other expresses an opinion. An ordinary witness who does not speak the truth may be prosecuted, but an expert cannot be reached by the law for expressing a false opinion. The opinions of medical experts carry no weight, because even those that are honest are discredited by what has become a pernicious system; and Dr. Ill thought that the law should be amended so as to make such scandalous conflicts of opinion impossible. The man that sells his opinion, he said, should not be allowed to remain a member in good standing in the Medical Society of New Jersey. The profession should put an end to a system that is already dead, in that it has outlived its usefulness.

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Oration in Surgery: *When Shall the Physician Distrust His Own Judgment in Surgical Matters?*—By Dr. Maurice H. Richardson, Boston, Mass.

It is most important, said Dr. Richardson, that the diagnosis be made early enough to check the disease in the beginning; and upon the shoulders of the physician, because he is the first in the field, rests the responsibility as to whether it shall be treated medically or surgically. The errors of surgery are often the result of a too favorable prognosis based upon a wrong diagnosis; and the largest proportions of these wrong diagnoses are due to physicians who are not experts in the diagnosis of tumors. The physician should distrust his own judgment when one decision means death and the other recovery. If there are strong possibilities of a serious or fatal lesion that the differential diagnosis cannot rule out and for which the only hope lies in immediate surgical intervention, then must the physician distrust his own opinion, even if that opinion is favorable. It is common for the surgeon to shift to the physician the responsibility for surgical failure. When there is

any doubt as to the placing of the responsibility, the surgeon should be eager to assume the burden. There are many cases, also, in which the physician should distrust not only his own judgment, but that of the surgeon. He should distrust the judgment of any surgeon who has failed to make a thorough examination. Surgeons do not always appreciate the weight of responsibility that the physician feels toward the family of his patient in recommending an operation. Dr. Richardson thought that the more intimate the association between these two branches of medicine, the better will be the results.

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*The Influence of Overweight and Underweight on Vitality.*—By Dr. Brandreth Symonds, Mutual Life Insurance Co., New York. Synopsis. Former standard of height and weight. Present standard. How constructed. Influence of overweight in determining an increased mortality. Varying effect of other conditions, such as age, sex, nativity, etc. Actual causes of deaths among overweights as compared with the general insurance record. Influence of underweight on mortality. Modifying factors, such as age, sex, family history, personal history, etc. Causes of death among underweights as compared with the cause of death in a general insurance population. Conclusions.

Dr. Richard C. Newton, of Montclair, opened the discussion. He said that in looking over the lists prepared by the Actuaries Society of America he had found that, according to these statistics, in those subjects heredity apparently has little influence in determining the longevity. This seems to indicate that obesity is a predisposing cause of death. As "an extra pound of fat means an extra mile of capillaries," it is not surprising that fat persons have weak hearts. Commercial travelers are very good risks, outliving their expectations; while the well-to-do and the well-fed do not live so long as the longevity tables say that they should. Probably the reason for the long life of commercial travelers is that traveling itself is wholesome. An increase of weight above twenty per cent. makes a risk bad. Below thirty years of age, these people are good average risks; but after that, if they increase in weight, they become very bad risks. The heart and kidneys stand the strain until middle life, and then begin to give way. Man's climacteric is fifty-four years, and many men drop over at about that age with apoplexy, heart dis-

ease, etc. Stout men are better risks in England than in America.

*Dr. Alfred A. Woodhull*, of Princeton, said that the standard as suggested in Dr. Symonds' paper is differently expressed from the standard in the military service, which is more convenient for common use. Under the insurance plan, the increase is a certain percentage; and one has to calculate percentages to obtain it. Under the plan adopted in examining recruits for the military service, if the applicant is up to the height of five feet seven inches, his weight should be about two pounds to the inch, and five pounds must be added for every inch above that height. Overweight and underweight amount in themselves, said Dr. Woodhull, to little or nothing, being merely indices of certain conditions that lead to unfortunate results. Personally, he would lay much more stress upon the vital capacity and the chest expansion. Discharges of any character, whether a pure hemorrhage or a serous discharge, are more likely to do damage in very fat persons than in those that are not so stout.

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*Report of a Case of Excision of the Stomach for Carcinoma.*—By Dr. Edward Staehlin, Newark.

The tumor involved the pylorus and was as large as a good-sized Bartlett pear. The mass was removed, with the greater part of the stomach, and the remaining part of the stomach was fastened to the intestines by an end-to-end anastomosis. The patient made a rapid recovery. The tumor of the pylorus was proved by the pathological report to be a scirrhus. A small mass on the greater curvature was a myoma composed of small muscle-fibres. The patient is now in excellent health. Her weight and appearance are normal, as well as her capacity for work. Her diet is general, but she eats frequently and little at a time.

*Dr. Reilly* said that he would like Dr. Staehlin to give the results of the chemical analysis of the stomach contents that had been made before he performed the operation. Dr. Reilly then referred to the difficulty in determining the condition of the stomach from any analysis that is at the command of the profession at the present time. He had in mind a case that apparently was one of carcinoma of the stomach. The diagnosis was, however, disputed by a good internist, on the ground that no tumor was palpable. Dr. Reilly thought that a diagnosis should not be made on this ground alone. He believed that the diagnosis of

carcinoma should be made, even with the absence of a tumor, when all the symptoms known to make up a cancerous condition are present. If any good is to be done by operation, the physician must be able to make out the diagnosis long before the appearance of a tumor.

*Dr. James T. Wrightson*, of Newark, thought that the fact that the patient had had five-eighths of her stomach removed, and yet the digestive processes were carried on so actively that she had regained her health, vigor and flesh, opened up a fresh field for thought in regard to the digestive tract.

*Dr. Staehlin*, closing, said that in his case there was a tumor and the analysis of the stomach-contents had proved positive. Even had the analysis been favorable, he would have concluded that an operation ought to be performed. On having the stomach-contents analyzed, he had frequently found that such analyses are not very reliable. In cases with such a severe manifestation of malignancy as that in Dr. Reilly's patient, Dr. Staehlin would suggest an exploratory incision, unless the patient's condition were cachectic and he felt sure that something could be accomplished by operating; because sometimes the stomach is so high up that, even though a tumor exists, it cannot be felt.

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*Tetanus, Its Prevention and Treatment.*—By J. Harris Underwood, Woodbury.

*Dr. Underwood* considered the most reliable germicide in these cases to be a solution of bichloride of mercury. Pure carbolic acid should not be used, because it seals up the bacilli by coagulating the albumin of the tissues. Patients with superficial wounds should at once receive an injection of 10 c.c. of antitetanic serum. The treatment after the development of the disease is directed to controlling spasm, overcoming the toxins, and supporting the patient's strength until the symptoms have subsided. For the first, chloral and bromides are valuable; for the second, the serum. Two cases of cure in patients with very severe attacks were reported. In the Cooper Hospital, Camden, the mortality had been 80 to 90 per cent. before the use of antitetanic serum; and 40 per cent. since.

*Dr. Reading* said that the value of the serum-treatment for tetanus is best known by the statistics of the St. Louis Hospital, where, prior to 1907, injections were not used until the symptoms of the disease had developed. In that year,



they began to inject 10 c.c. of antitetanic serum into every suspicious case. Formerly there had been a great many cases followed by death after every Fourth of July; but this year there developed no case of tetanus. Even negative evidence as comprehensive as this, said Dr. Reading, acquires a great deal of weight. He thought it would be well for all hospitals to adopt the plan of giving a preventive injection to each patient whose case may be open to suspicion. In cases in which serum treatment was not available, Dr. Reading has seen good results from carbolic-acid treatment. The statistics from its use abroad are good; and he thought that if it were more generally tried here they might be good in this country. He had seen a number of suspicious cases treated by thoroughly washing out the wound with peroxide of hydrogen, and none were followed by tetanus.

Dr. J. H. Bradshaw, of Orange, considered it unfortunate that in the treatment of tetanus after the symptoms have developed, the remedies given are almost as dangerous as the disease. The huge doses of morphine, chloral and other drugs administered would often kill a person in good health.

Dr. Wrightson said that the use of the serum certainly does cure some cases. In one case treated at the City Hospital of Newark, he had no doubt that the outcome without this treatment would have been fatal. The cost of the serum used in this one case was three hundred and seventy-five dollars.

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### Second Day, Friday, June 19th.

#### GENERAL MEETING—MORNING SESSION,

9 A. M.

The first paper presented was the annual address by the Third Vice-President, entitled, "*A Brief Review of Hernia, as Understood and Treated at Different Epochs by the Past and Present Masters of Surgery*," by Dr. Thomas H. Mackenzie, Trenton.

Synopsis: The evolution and trend of medical thought from the most remote periods to the present time. The truss as a retaining and curative apparatus. A brief description of the crude operations practiced by ancient surgeons in this country and abroad. The pathology of the disease. Predisposing and exciting causes. Contrasting the efficiency of modern methods with those of the ancients. The brilliant results obtained by the present-day methods.

The next paper was on "*Acute Intestinal Obstruction*," by Dr. Robert M. Curts, Paterson.

Dr. Curts confined himself to a few interesting points. The importance of early recognition of the condition and of surgical treatment within thirty-six hours; the relative frequency of the condition, there being one death from it in every three to five hundred deaths from all causes; the helpfulness of having a good mental picture of the intestines; the mortality in the different forms of acute obstruction; the ages of the patients in the different kinds, and where the knowledge of the physician ends and that of the surgeon begins. The prognosis is always grave, the only hope being in surgical treatment. Researches have given little clinical aid to the diagnosis. Acute intussusception is the form most readily diagnosed, being the only one in which the pathological and anatomical relations can be made out with any degree of certainty. The treatment for it is immediate abdominal section. It is impossible to make a diagnosis of any particular type before operation, and quite unnecessary. Attempts to do so only delay what should be an early procedure. The two most important symptoms are severe abdominal pain and inability to pass flatus. The first is common in other visceral diseases, but the second is true only of acute intestinal obstruction.

The discussion was opened by Dr. Thomas W. Harvey, of Orange.

Dr. Harvey said that no condition requires more accurate and certain diagnosis or more generous early surgery than acute intestinal obstruction. The diagnosis is made much less frequently to-day than twenty years ago, and operations for its relief are less common now than formerly. Many cases of abdominal disease that were formerly allowed to go on to obstruction are now cured before that symptom appears, and the proper treatment of others relieves the obstruction. On the other hand, a new fruitful cause of obstruction is presented by the effects of laparotomy. Dr. Harvey agreed with Dr. Curts that operation, to be successful, must be done in the first twenty-four hours; and he did not see the advantage of first attempting any other method of forcible reduction. The most important point to decide is whether one shall do a complete or an incomplete operation. Another point to decide is what shall be done to insure the return of normal peristalsis; and just how much evacuation of the bowel will be required to relieve the obstruction.

Dr. James S. Brown, of Montclair, said that a phase of the treatment of intestinal obstruction to which the attention of the Society should be called is that of distention. A Moynihan's tube is placed in the intestines, which are then strung on it. By this means, instead of there being a mass of distended loops of intestine, the bowel is flat. The abdomen can then be entered with comparative ease to seek for the cause of the obstruction.

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*"Clinical Features and Treatment of Acute Perforating Gastric and Duodenal Ulcer,"* was the title of a paper presented by Dr. Ellsworth Eliot, Jr., of New York.

Dr. Eliot reported ten cases, eight duodenal, and two gastric. The two are quite similar. Both are occasionally multiple. Perforation is also often multiple. The cases of multiple perforation of the stomach may be divided into those in which there are several perforations in the same ulcer and those in which several perforations occur in more than one ulcer. In most cases of perforation of an ulcer on the anterior wall, if there is another perforation, it will be found on the posterior wall, just opposite the one on the anterior. The condition is rarely recognized in time for operation to be successful. The principal symptom is excruciating pain, usually situated between the costal margin and the umbilicus. The most important physical sign is abdominal rigidity, which is constant. Leukocytosis is of particular interest in the diagnosis. In most cases without perforation, it is decidedly above the normal; and in perforation, it is doubled. Laparotomy is the only rational method of treatment for perforation, and should be performed at the earliest possible moment. The incision should be made at the maximum point of rigidity. Many cases are operated upon under an erroneous diagnosis of appendicitis. This does not make much difference, because the operator can tell that he is not dealing with an appendix case as soon as the abdomen is opened, on account of the character of the fluid. If gastroenterostomy is necessary on account of stenosis of the pylorus, it is better to do it subsequently, and not at the time of the closure of the perforation.

The discussion was opened by Drs. Gordon K. Dickinson, Jersey City, and James S. Brown, Montclair.

Dr. Dickinson said that the medical profession is intensely interested in the pathological diagnostic points in gastric and duodenal ulcer conditions. The surgeon is de-

pendent upon the average practitioner for diagnosis; and many of the latter will make a diagnosis of dyspepsia, and let the condition run on indefinitely. The patient, therefore, comes to the surgeon in an unsatisfactory condition. Every anemic woman and every person with a chronic, continuous, or relapsing disturbance of the stomach should be so treated as to minimize the possibility of the formation of an ulcer. If the symptoms continue for any length of time, the surgeon should be consulted.

Dr. Brown said that the symptoms of gastric ulcer and perforation of duodenal ulcer are acute only in typical cases. Unfortunately, however, there are many cases with symptoms of spreading peritonitis in which one is undecided whether the symptoms are due to perforation at the duodenum or pylorus or at the appendix or gall bladder. He thought that even the cases, which cannot be positively diagnosed as due to a ruptured duodenal ulcer, have about them something that makes one doubt that the condition is due to a rupture of either the appendix or the gall bladder. An incision that will cover the field should in any case be made. Pain in the abdomen is relative, one patient suffering severely, and another not so much. When the abdomen is distended and there is a lack of liver fatness, a little difficulty will arise in the diagnosis. The cases in which the abdomen is opened late, only a small amount of fluid being found, with immense distension, are rapidly fatal.

Dr. Harvey thought it interesting that for the second time during the meeting the operation of gastroenterostomy, which at one time had threatened to connect every one's stomach with his intestines, had received a check. While he considered that there are legitimate and proper indications for this operation, he doubted that it should be used for drainage or for bleeding ulcer.

Dr. F. D. Gray said that the literature regarding the subject is meager and the number of cases small. For this reason, one case might be of interest. He had made the failure in diagnosis mentioned in the paper, that of taking a case of perforating gastric ulcer on the anterior wall for one of appendicitis.

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*"Remote Pain Following Abdominal Operations,"* by Dr. William E. Darnall, Atlantic City.

Dr. Darnall confined his attention to the pain that persists after the patient has left the hospital and has come under the care of



the attending physician, who is worried because the operation has not relieved the patient as he had hoped. This pain usually disappears gradually, but sometimes persists indefinitely. When a second operation becomes necessary, observation will show that the condition is due to adhesions. In trying to remove pathological structures, the surgeon sometimes forgets that it is important to consider the future welfare of the patient and try to prevent the occurrence of these symptoms following the operation. The bowels should be handled as little and as gently as possible, and should be protected with compresses moistened with hot salt solution. Every effort should be made to eliminate the possibility of the formation of post-operative adhesions. Every clot left may become an organized adhesion or the focus of infection. Abdominal surgery should not be attempted unless the muscles are relaxed and pliable. The incision should be made so long that it will not need to be stretched with retractors. Any raw surface in the abdomen left exposed should be carefully covered. Patients measure the gravity of their condition by the amount of pain they suffer; and if the adhesions produce more pain than the original condition did, they feel that the operation has done no good.

Discussion was opened by Dr. Elsmore Stites, Bridgeton.

Dr. Stites said that in estimating the intensity of pain or its diagnostic value, one must remember that reaction to it varies almost indefinitely in different individuals. It seemed to him that one should consider whether the pain is a continuation of a previously existing one or is an entirely new symptom developed post-operatively. He thought that its character should likewise be considered, and also its location, together with the presence or absence of fever.

Severe pain of any other than the neurotic form, said Dr. Stites, seldom presents itself as a sole symptom; and it seemed to him that when other symptoms of the presence of adhesions are wanting, operation for the relief of post-operative pain should not be undertaken. The stimulus of an operation added to the already unstable nervous centers cannot help but awaken many reflexes.

Dr. Darnall, in closing, said that all must appreciate the fact that pain is too big a subject to make a single reference to it; for it would take too long to consider even a single group of its causes. The subject takes in the whole field of medicine and

surgery. Neurotic pain, itself, is a very wide field, particularly that associated with hysteria and that in morphine-habitués.

Dr. Ill said that his experience had been that such operations never produce pain unless they displace an organ so as to impair its mobility.

Dr. Gray thought that in opening the abdomen for the purpose of relieving adhesions, new ones were likely to be produced, just as the adhesions had been formed in the first place.

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*"Reflex Gastric Symptoms, a Factor in Surgical Disease of the Abdomen,"* was the title of a paper read by Dr. John P. Reilly, Elizabeth.

Synopsis. Its importance in the early recognition of pathological lesions. Somewhat similar under various conditions. Long recognized in certain surgical conditions of the abdomen. What abdominal surgery has done to clear up obscure conditions. Frequency and prominence of gastric symptoms. Present at times when the lesion is not in the stomach, but elsewhere in the abdomen. Points in differential diagnosis. Illustrative cases. Treatment.

Dr. Gray had often wondered why a deformed or diseased appendix, particularly a chronic one, gives rise to gastric pain or other gastric symptoms; and why a gall-stone condition with adhesions about the biliary system causes gastric symptoms, including pain. He had sometimes thought that the sympathetic system might be more chargeable with the symptom complex than any other structure; for he believed it possible that the irritation of a diseased appendix or a diseased gall-bladder, through the control of disturbances of circulation in the sufferer, might be able to produce the gastric disturbance. In his opinion, exploratory incision should be a last resort, and should not be undertaken lightly; because it is not danger-free. He thought, however, that the value of exploratory incisions must be recognized. When a patient gives a history of having had for a year or more gastric disturbances that have been treated by all available internal methods without success, one is warranted in opening the abdomen and making an inspection of the stomach.

Dr. Emery Marvel, of Atlantic City, said that in no other place in the body are so many reflexes manifested as in the stomach. The middle coat is a development of the plexus of Auerbach, which supplies and controls the power of the muscle-wall of

the gastro-intestinal tract. The pylorus and the ileocecal valve are stronger than the rest of this, the former being the stronger of the two; and any irritation is likely to manifest itself there.

## SECOND DAY—FRIDAY, JUNE 19.

AFTERNOON SESSION—4:45 O'CLOCK.

The first paper presented was entitled "*Acute Anterior Poliomyelitis, with Special Reference to the Recent Epidemic*," by Dr. David T. Bowden, Paterson.

Dr. Bowden considered the etiology; the symptoms; the different stages; the diagnosis, prognosis, and treatment. In conclusion, he emphasized the fact that no operation should be performed, except possibly a tenotomy, until some years after the primary infection, when all other possible chance of recovery has passed. No operation should be attempted without a thorough electrical test having been made and, possibly, a destruction of the muscle demonstrated.

Dr. F. D. Gray, of Jersey City, in the absence of Dr. Bogardus, read the notes which Dr. Bogardus had prepared. In these Dr. B. gave statistics of 872 cases of infantile paralysis treated at the clinic of the New York Orthopedic Hospital in the period from January 1, 1896, to December 31, 1907. He stated that it had been estimated that half the crippled children wearing braces were doing so as the result of this disease, which must be considered one of the most tragic things in the practice of medicine. It had been hoped, he said, that by a study of an epidemic of the disease occurring in a crowded American city, a good deal might be learned concerning it; but, unfortunately, little had been added to the sum total of the previously existing knowledge regarding infantile paralysis.

Dr. D. E. English said that he had suspected anterior poliomyelitis to be an infectious disease for some time, although this had not yet been proved to be the case. The few instances of the disease that he had seen had borne out the hypothesis of Dr. Bowden that it has some connection with acute or chronic digestive troubles. Dr. English's patients had been very much constipated. In one case there was fecal impaction, and he extracted from the intestine quite a quantity of chestnut-shells, peanut-shells, and pieces of coal. He thought that it would be interesting to know whether this depraved appetite had any

connection with the disease. In all the few cases in babies that he had seen, the infants had been fed with beer; and he thought that the effect of the alcohol on the infantile or childish system might have some bearing upon the case.

Dr. Thomas P. Prout, of Summit, said that the results of nerve-grafting do not carry out the expectations that were formed regarding it in the first place; and he thought that probably the best that can be reported about it is simply an improvement in the general nutrition of the limb, which, of course, is worth something. Associated with this improvement, there is often for a long period an added palsy, on account of the engrafting of dead nerve-tissue into the living structure. In regard to the treatment, he thought it wrong to torture these children with electricity. In the early stages, he said, the cases partake very largely of the nature of a neuritis; and to stimulate the surface of the body with electrical currents during the course of a neuritic process has a torturing effect. Electrical treatment, therefore, should not be employed until at least four weeks have elapsed. He thought that it would be found that these cases belong to the great number of latent infectious processes that become active only through lowered vitality and resistance on the part of the child, due to various causes.

Dr. Martin J. Synnott, of Montclair, referred briefly to one case that seemed to him to have some bearing upon the etiology of the disease. The symptoms in this case pointed strongly to typhoid infection. A blood-examination disclosed an enormous number of malarial parasites of the estivo-autumnal variety. The paralysis developed on the third day of the fever, and the subsequent course clearly pointed to poliomyelitis. Dr. Synnott wondered whether the malarial parasites could have had any bearing upon the poliomyelitis. He thought that there might have been a double infection. His experience had been that these cases improve as rapidly under the stimulation of vibratory massage as they do under that of either galvanism or faradism, and with less discomfort to the patient.

Dr. W. M. Leszynsky, of New York, said that anterior poliomyelitis seemed to him a bad name for the cases that occurred during the recent epidemic, because a large number of them did not correspond to the usual type of this disease. A number showed the characteristics of an encephalitis or a myelitis and, to a slight extent, of a neuritis.



He agreed with Dr. Prout in regard to the treatment. He did not think it necessary to examine thoroughly by means of galvanism in order to determine the presence of the reaction of degeneration. He scarcely considered it wise to wait until deformity has developed before instituting the orthopedic plan of treatment. One should accept the fact that a child with paralysis of the foot is likely to have foot-drop, and should immediately place the foot in an apparatus to prevent the stretching of the anterior group of muscles.

Dr. J. Gaunt Edwards, of Williamstown, said that, when used at all, electricity should be applied in its mildest form. If the muscle should refuse to respond after half a minute, the current should be stopped; as the already weakened muscle has been tired out. He had been much struck with the remark of Dr. English regarding the influence of a depraved appetite in these cases, as only a few months before he had himself had a patient who would eat peanut shells, chalk, and coal, and relish them. Needless to remark, he had a good deal of gastric trouble.

Dr. Bowden, closing, said that he had thought that he had indicated in his paper that electricity should not be used until tenderness has subsided. As to how much should be employed, he thought that an amount sufficient to produce contraction should be applied. The idea of the therapeutic effect of electricity is that it is merely a massage of the muscles. This is why the orthopedic treatment has been recognized as of more importance than the electrical or neurological; it places the child in a position to use any voluntary power that it may have. In the chronic stage, as soon as the child is able to carry a supporting apparatus, it should be put on. Dr. Bowden thought that no one could reasonably question the benefit of electricity.

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*"The Importance of Studying the Condition of the Heart Muscle in Various Diseases"* was the title of a very interesting paper by Dr. Hobart A. Hare, Philadelphia, Pa.

Dr. Hare said that it was not his intention to deal with valvular changes, but with changes in the muscle: (1) After acute overstrain; (2) after chronic overstrain; and, (3) months and years after the overstrain has passed away. In the first class, the murmur disappears shortly after the exertion ceases. In the second, it persists until after a long period of rest. It is not enough to diagnose the heart-condition; its

cause must be found. The great strain produces the great hypertrophy. After the age of forty-five, the conditions alter. The arteries still remain wide open pathways, but the heart acts less forcibly, and the blood-pressure falls. The final period of life is hurried upon the man, and he becomes prematurely aged in the fibroid changes, resulting in rigidity, which increase arterial tension, particularly when exertion is made and throws a great strain upon the heart, which is unable to meet it. The attempt to do so brings about the hypertrophy of old age. One is frequently consulted by patients prematurely or actually aged, who think that their lack of health depends upon lack of exercise, when it depends upon other causes that should be corrected. It is one's duty to prevent these patients from taking excessive exercise.

The discussion was opened by Drs. Philip Marvel, Atlantic City, and Martin J. Synnott, Montclair.

Dr. Marvel said that a subdivision of changes arising in the circulation into those attacking the endocardium and those attacking the myocardium must be made. In those attacking the myocardium, one is often dealing with the results of some infectious disease that has preceded the first evidences of heart trouble; though perhaps not with the end results. He had been forced to conclude that heart conditions sometimes have their origin from a toxemia. He wished to make a distinction between toxic causes and toxic causes. By the first, he meant the conditions arising from bacterial changes peculiar to the food; and by the second, those conditions arising from bacterial causes external to the body. Toxemic causes, he said, may be bacterial; but they are from the bacteria of the intestinal tract, and not from those extraneous to it. In the second class of cases, those arising outside the circulatory organs, there is a mixed condition present. Primarily, there is the involvement of the circulation in the sclerotic changes in the vessels; and there is also the nutritive change, which is taking place simultaneously with the sclerotic change, and involving the muscular fibers of the myocardium itself. Hence, in this class of cases there are operative more than the causes that affect the heart from within the circulation. In regard to the class of cases that arise primarily from disturbances of the nervous system, it seemed to Dr. Marvel that one has to deal with causes of which the profession has little definite knowledge. They

may have had their origin years before the patients are seen.

*Dr. Martin J. Synnott*, of Montclair, referred briefly to a plan of treatment for the alleviation of heart-disturbances, especially disease of the myocardium and derangement of the cardiac nutrition. This method consists in the use of hot CO<sub>2</sub> saline baths, as administered at Nauheim, in Germany, especially when combined with muscular exercise and so-called resistance movements. Myocardial derangements respond most readily to this form of hydrotherapy. The results are not so good when the treatment is carried out at home.

*Dr. Alexander Marcy, Jr.*, of Riverton, emphasized the need of absolute rest in many cases of myocardial disease, particularly the acute variety. It should be continued for a sufficient length of time to allow the myocardium to recover its tonicity.

*Dr. Hare*, closing, said that he wished to add one point to what he had already said. In listening to the hearts of persons whose general systems do not seem much tired one may often learn that the body is tired because the heart-sounds denote it. A large proportion of so-called cardiac cases do not depend upon valvular lesions, even when a murmur is present, the condition being due to relaxation of the mitral or tricuspid orifice. The cardiac sounds in such cases should be studied, not in connection with murmurs, but as indicative of the general tone of the circulatory system.

A vote of thanks was given to Dr. Hare.

The next paper on the program was "*Observations on Bronchial Asthma*," by Dr. J. Hervey Buchanan, North Plainfield. In the absence of Dr. Buchanan the paper was read by title.

"*The Psychic Element in Medical Practice*" was the title of a paper presented by Dr. Linn Emerson, Orange.

**Synopsis.** The practice of medicine as much an art as a science. Medical art in early times. Undue prominence of the material side during the past century. Recent revival of psychic methods. Analysis of present tendencies. Only men temperamentally fitted should be encouraged to begin the study of medicine. Mental vs. material methods.

The discussion was opened by Drs. T. N. Gray, East Orange, and W. M. Leszynsky, New York.

*Dr. Gray* said that early medicine was almost entirely psychic, the priest having been the physician. Through all the advance-

ment that has been made in medicine along physiological lines, and with the newer knowledge of pathology, the ego of the physician still remains a powerful factor in the treatment. This influence is exerted through statements calculated to win the patient's confidence; and his success is in proportion to the truth of these statements. Though there exist minds that can be affected by quacks, yet, for every charlatan, there are hundreds of general practitioners earning their living and keeping the confidence of their patients.

*Dr. Leszynsky* said that many members of the medical profession have inadequate or erroneous conceptions regarding the prevailing views as to the present psychotherapeutic agitation, and that others have given the subject no attention at all. Psychotherapy should not be characterized as a method confined to special forms of psychical analysis, persuasion, and hypnotic suggestion to the subconscious mind; within its sphere should be included isolation, educational measures, healthful occupation and diversion, and encouragement. Psychotherapy alone cannot, in the majority of instances, supplant a rational plan of medical treatment; but it can be used by the average physician in connection with his daily work. Its practice as an exclusive method demands special skill and training, and is applicable to selected cases only. It is by no means a panacea, its usefulness being limited. The recent wave of public interest in psychotherapeutics, fostered by a superabundance of literature on the subject, has naturally resulted in an exaggeration of its importance. Dr. Leszynsky thought that the medical profession should take concerted action in attempting to prevent the practice of this form of therapy from being left unrestricted to the churches.

*Dr. Charles A. Rosenwasser*, of Newark, thought it time that a warning should be sounded against believing much that is written in regard to the psychic treatment of various disorders, and said that the statement of Dr. Quackenbos that he had cured seventy-five to eighty per cent. of eight hundred alcoholics within a period of from six months to six years did not ring true. One can influence a man in a normal waking condition by talking to him, and one may also make suggestions to a man in a somnolent state, but Dr. Rosenwasser firmly believed that for a physician to talk to a person asleep would be wasting valuable time. Neither did he believe that a physician, when himself asleep, can influence another person.



Dr. William G. Schauffler, of Lakewood, thought that one should be careful to avoid extremes. Such books as those referred to by Dr. Emerson, while interesting to a careful, thinking man, are dangerous for the general public. Dr. Schauffler has recently spent several days in Boston, and had made careful inquiries regarding the work of the Emmanuel Church Clinic and of the men interested in promoting it. He had been told by one well known Boston neurologist that in the beginning he had taken great pleasure in sending patients to this clinic, because he had felt that the work there was conscientiously done; but that during the past few months he and others had had to give up sending patients there, because the work has so overwhelmed the men in charge of it that they are picking out only the most likely cases. Dr. Schauffler was also told that at the clinic they will not try to cure any alcoholics that cannot state that they have the power to abstain from liquor if they wish to do so. He thought that in this case it was no wonder that they get ninety per cent. of cures.

Dr. Prout thought that the most important thing in regard to this matter would be for the physician to try to understand these phenomena. He had found that the laity, as a rule, expect the physician to scoff and jeer when these things are mentioned. He considered that looking at them in a derisive way would carry no weight with patients, unless one could show that such methods do positive harm.

Dr. H. C. Neer, of Park Ridge, said that it is undoubtedly true that such methods do a great deal of good; for it is not likely that all the persons that claim to have been cured are lying. He thought that after a time the method would find its right place, as almost all new methods met with opposition at first. He admitted, however, that its practice should be properly regulated, the same as that of any other therapeutic method.

Dr. Emerson, in closing, said that specialists and enthusiasts are always prone to overestimate the results in such cases.

*"Methods of Preparing Specimens for Laboratory Examinations, with a Brief Resume of the Value of Chemical and Laboratory Methods in Diagnosis,"* by Harry A. Cossitt, Morris Plains, was read by title.

Synopsis. Methods for the general practitioner to obtain, prepare and dispatch specimens. Co-operation of the clinician and laboratory worker. Complete history

should accompany every specimen. Resume of recent methods of diagnosis, *e. g.*, the sphygmomanometer, examination of gastric contents and feces; the cutaneous and ophthalmic reactions in tuberculosis, typhoid fever and diphtheria, and the serum diagnosis of syphilis. Opsonins and vaccines.

#### FRIDAY EVENING 7:30 P. M.

Annual Banquet at Hotel Cape May.

Toastmaster, Dr. Edward J. Ill. Dr. Ill read an interesting review of the "Medical History of New Jersey."

#### TOASTS.

"*The General Practitioner*," responded to by Dr. Stephen Pierson, Morristown.

Dr. Pierson said in part: "Now, what shall I say about the general practitioner, when there is so much to be said about him and so little time in which to say it? Perhaps it is best to say nothing at all; because by my saying little, you might infer that this was all there was to be said, which is not true. This is the age of specialties in manufacture and in medicine. Specialism in manufacture has benefited the factory and the consumer; specialism in medicine has benefited the doctor and his patient. The general public, however, still look to the general practitioner for protection and safety; and to the general practitioner also comes the specialist, with his prayer, 'Give us this day our daily bread.' Really, however, there is no rivalry between the general practitioner and the specialist. The general practitioner needs to know when he knows; and second, and more important, he needs to know when he does not know. Then, if he is honest, he seeks the aid of some man who ought to know by reason of special study. We need each other; we need the specialist, and he needs us.

But the practice of medicine and surgery is not all pills and potions or even appendices. There is in it, at times, that which is inspiring, and even heroic. It is not necessary to fight or be killed, in order to be a hero. Dr. Lazear, down in Cuba, during the American occupation, when yellow fever was ravaging our army, in order to prove the correctness of the opinion that the mosquito is the only real transmitter of yellow fever from man to man, allowed himself to be bitten by mosquitoes that had previously sucked the blood of a man dying of that disease. He took it and died. To me, that was heroism most sublime; and, speaking with the utmost reverence, it seems to me that it was heroism Christlike in sublimity.

So he died; but in his death, he gave life to thousands upon thousands.

Now it may not be given to all of us to rise above the ranks, to be honored with bronze tablets or monuments; but to many does come the opportunity for heroism; and there is something better than letters of praise imprinted upon a monument. The bronze tablet will turn green and corrode; the letters of praise on a monument are, at best, cut in a dead stone, erected in a city of the dead; but for every honest doctor there is something better, truer, lovelier—strong words of praise and gratitude and admiration on a living monument, glowing there in letters of light and love, increasing in strength, because they are founded upon life, and that life is the heart of our patients. When that day shall come which must come to every man, if it shall be given me to know that upon the hearts of some of the many to whom I have ministered it is written, 'He gave to me much,' and if upon the hearts of a few, if only a few, it shall be written, 'He gave to me all,'—then will my ambition as a medical man be satisfied; then shall I lie down to sleep, saying, 'I am content.'

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*"The Medical Man as a Teacher."*—Dr. Hobart A. Hare, Philadelphia.

Dr. Hare said, in part: "I have been asked to respond to the toast of the Teacher in Medicine. I do not think that I should respond to it meaning the teacher in the medical school, but rather in the sense of what medical men who value their profession endeavor to teach their lay brethren and fellow practitioners. They endeavor to teach, first, how persons may protect themselves from being ill; and, in so doing, belong to the only guild that deliberately, with its right hand, attempts to take business from its left. Perhaps it is fortunate for us that the presiding hand which governs this place sees that we do not succeed too admirably. We teach men to be healthy and to lead earnest lives; and certainly a very large proportion of the profession teach not only by word of mouth, but also by deed, what pure lives are. The medical profession does something more than this, however. Very unconsciously, it continues to impress upon the fiber and sinew of the community that bravery is always present. This impression is so constant that it does not often loom up large. The doctor is expected, as a matter of course, to go into the presence of disease and death; and no more mention is made of it than would be if a graduate of West Point or Annapolis

did it. It is only when the public stops to think that they are impressed with the fact that this is brave."

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*"The Doctor as a Politician."*—Hon. Joseph S. Frelinghuysen, Raritan.

Senator Frelinghuysen spoke of the work done at Trenton during the last three years, in the contest for the maintenance of decent and intelligent standards of medical and surgical knowledge. He said that much constructive legislation had been attempted, a great deal of this having been successful, although some was not. A comprehensive pure food law was passed; the tuberculosis sanatorium at Glen Gardner, where the curable tuberculous patients are taught to care properly for themselves, was opened; and great improvement was made in the sewerage laws. Dr. Coit's measure to form medical boards for certifying milk was introduced too late and in too crude a form to succeed. The slaughter-house bill was passed by the Senate, but was killed in the House. The anti-vivisection bill also failed. The osteopath's bill was defeated after a great deal of hard work, but Senator Frelinghuysen had no doubt that they would try again. In spite of all that had been said in its favor, he doubted the wisdom of physicians entering into politics. He paid a high tribute of praise to the unselfish work of the profession in laboring for the public good.

A vote of thanks was extended by the Society to the gentlemen whose eloquence they had enjoyed.

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### THIRD DAY—SATURDAY, JUNE 20.

#### GENERAL MEETING.

##### *Morning Session, 9 A. M.*

The first paper was entitled "*A Resumé of Modern Methods of Treatment for Posterior Displacements of the Uterus*," and was presented by Dr. J. Watson Martindale, Camden.

The object of the paper was to point out the advantages and disadvantages of each operation and the conditions under which the different operations are indicated. The objects of operations for posterior displacement of the uterus are repair of the pelvic floor and the bringing forward of the uterus into a position of ante-version.

1. The Alexander operation, Dr. Martindale considered the operation of choice in cases in which the perineum is intact or has been repaired, if there is no evidence of disease of the uterus or appendages, and if the uterus is not excessively large. He had



a bad result in only one case operated on by him according to this method.

2. Vaginal fixation with anterior colporrhaphy is useful in cases in which there is a cystocele and when the patient is beyond the child-bearing period. The results in cases seen by Dr. Martindale were excellent.

3. Ventral fixation is of value in cases of procidentia, when the woman is beyond the child-bearing period. It is usually first necessary to do an anterior colporrhaphy. The results of this operation are bad in women in the child-bearing period.

4. Ventral suspension is used in place of ventral fixation. The only difference between the two is that in ventral suspension the silk suture engages only the peritoneum. Dr. Martindale, during the last two years, has seen ten cases subjected to section after having had the uterus suspended. The band of peritoneum supporting the uterus had in most cases stretched so as to give no support to that organ. Another objection to ventral suspension is the fact that it is not an anatomical operation.

5. The Gilliam operation was devised to overcome the difficulty arising from the fixation operation and also from the suspension operation during the child-bearing period. Gilliam proposed to shorten the round ligaments through an abdominal incision. Dr. Martindale had seen three cases operated on by this method. The results were excellent, and no untoward conditions arose afterward.

6. Simpson's operation, according to a modification devised by Dr. Charles P. Noble, of Philadelphia, has all the advantages of the preceding ones, and Dr. Martindale had heard no serious objection to it. It is a recently invented procedure, so that he had had no opportunity to observe its effects upon subsequent labors. In twenty cases observed by him that were operated upon by this method, the results were good.

In retroversion following labor or miscarriage, tamponage and the pessary are indicated. In retroversion with no adhesions and a moderate-sized uterus, the Alexander operation would be the proper procedure. In the case of women past the menopause, when an anterior colporrhaphy is required, vaginal fixation will probably be effective, if the uterus is of moderate size. In procidentia uteri beyond the climacteric, amputation of the cervix with a ventral fixation will probably effect a cure. In procidentia during the child-bearing period, amputation of the cervix with ventral suspension, taking a strand or two of the muscle along

with the peritoneum, will be suitable. In retroversion with a moderate-sized uterus, when it is necessary to open the abdomen for inflammatory disease, shortening of the round ligaments after the manner described by Gilliam or Simpson will be the operation of choice.

The discussion was opened by Dr. Edward Staehlin, Newark.

*Dr. Staehlin* said that the point in the resume that had impressed him most was the description of the case of complete procidentia in the woman beyond the menopause. In such a class of cases, he would recommend a vaginal hysterectomy, rather than the procedure recommended by Dr. Martindale. Dr. Staehlin considered chlorosis an important factor in the production of retroflexion. He believed the Gilliam operation to give the best satisfaction as a method of restoration, and always employs it. He did not think so much of the Alexander operation as of any of the others mentioned, and wished to know whether in performing it Dr. Martindale cuts off the round ligament after it is fastened.

*Dr. Martindale* said that he cuts off the redundant portion.

*Dr. Staehlin* suggested that it be left, giving as his reason that if, after it has been removed, anything should happen to the ligature, more trouble would be caused than was present in the natural state before operation. Dr. Staehlin then referred to the difficulty in finding an adequate means of restoring the pelvic floor. From the fact that there are so many methods of restoring the perineum, he thought it might be inferred that there are few of these that are adequate. A superficial tear down the median line, he said, may be easily overcome; but when the tear is lateral and very extensive, there is a tendency to procidentia. In order to have a successful result, the perineum should be restored in an anatomical way. He considered preliminary amputation of the cervix a good point, and thought that the sound had proved to be a pernicious instrument. If a perforation is present, he believes in awaiting developments; as he feels convinced that in many cases of rupture of the uterus followed by a small perforation the wounds have healed spontaneously.

*Dr. Ill* said that he did not believe that the anatomy of the condition is thoroughly understood. In his experience, retroposition of the uterus had produced a large number of pelvic symptoms with a pathological interest. He considered the Alexander operation ideal, so far as anatomical condition

goes; but thought the Gilliam the most practical. By means of his own modification of this procedure, Dr. Ill and his assistants had operated upon about five hundred of these cases, with less than one and a half per cent. of failures; and he thought that no other operation could show so small a percentage. Gilliam had told Dr. Ill that he was about to give up the operation that goes by his name, on account of the large number of suppurative cases that he had had. Dr. Ill's modification overcomes this tendency, and he thought that its only possible danger was that the ligament might not be pulled out far enough. If it is grasped out so far as to prevent the tube from coming near the opening of the peritoneum and forming an adhesion, there will be no subsequent pain. Dr. Ill had seen a great many labors following his operation. In regard to ventral fixation, he said that he had seen more damage done by this procedure than could be made good in a hundred years.

*Dr. T. N. Gray* said that he had wondered at not having heard some mention of the Webster operation, which had appealed to him as being satisfactory, simple and effective. He wished to make a plea for more sections in cases of posterior displacement. While he had remarked the day before that he did not believe abdominal section to be altogether without danger, he thought that, comparing the slight danger attached to it with the benefit of the surgeon's knowing the whole pathology and being able to make a satisfactory support for the uterus, one must conclude that sections should be more frequent than they now are.

*Dr. Rector* said that the author of the paper did not seem to consider the fact that there are other things causing displacement than simple gravity, such as chronic metritis and salpingitis, with adhesions. In order to relieve these conditions, something else than the procedure described by Dr. Martindale is necessary. It appeared to Dr. Rector that all the operations mentioned are successful when applied to the proper conditions. The operation must be suited to the case. One should not say that if such and such a positive indication is present, one must do the Alexander operation; another, the Gilliam; and if a third, the vaginal. Dr. Rector also remarked that Dr. Martindale had not stated that one must take into consideration the outlying conditions that have brought about the changes giving rise to the retroverted uterus, and said that if he were to advise looking into these conditions and treating them before operation, the results would be better.

*Dr. Chavanne* remarked that it is the duty of the surgeon to make sure that his diagnosis is correct before inducing a patient to submit to operation. He thought that many physicians have not sufficient sympathy with patients suffering from hysteria. He was satisfied that displacement of the uterus is often caused by the prudery of American women. Any medical man that does not take into consideration the history of the patient, her susceptibility, her emotions, and her occupation, before making a diagnosis, is committing an error.

*Dr. Harvey* said that he had not heard the part of the paper in which Dr. Martindale had mentioned the beneficial effect of pregnancy upon retrodisplacements. He thought that the general practitioner would bear him out in the statement that pregnancy has often cured retrodisplacements that have existed for some time.

*Dr. Ill* stated that Munde had published some statistics in relation to this point, showing that only three per cent. of such cases get well after pregnancy.

*Dr. Emery Marvel* said that in every retrodisplaced uterus there is a prolapse, and the fundus is lower than it should be. An operation that will elevate the fundus of the uterus should be done. He admitted having had one accident, the cause of which Dr. Ill had cleared up for him, that of getting necrosis in fastening the round ligament in the Alexander operation. The stump of the ligament was, however, fastened sufficiently to the fascia of the rectus to hold the uterus in position. In ventral suspension, this difficulty is corrected; and the danger of its occurrence is much reduced in Dr. Ill's modification of the Gilliam operation. If adhesions are formed between the anterior surface of the abdomen and the fundus of the uterus, these adhesions cannot, Dr. Marvel thought, be limited. All things being equal, he considered Dr. Ill's modification preferable to the original Gilliam operation. The fact that it elevates the uterus from its displacement makes it the one in which there is the least likelihood of hernia or necrosis.

*Dr. Drake*, of Tennessee, said that imaginary diseases are real, material entities with a pathological basis; and the trouble can often be removed by diverting the patient's attention from the conditions that give rise to the material images in the brain. The reason of there being so many operations for procidentia and for appendicitis in modern times, and so few in old times is that the attention is now so often called to these particular organs through the



prominence given to them by the operations of the surgeon. When the attention is concentrated for any length of time upon any particular part of the body, a pathological condition is finally produced in that part. If the attention of the patient could be turned away from their internal organs, Dr. Drake thought there would be fewer pathological conditions.

*Dr. John P. Reilly*, of Elizabeth, said that the discussion ought not to be closed without a further consideration of the shortening of one or both uterosacral ligaments; and that he would be glad to hear more from Dr. Ill upon this subject, because unmarried patients have persistent dysmenorrhea, and married patients, dysmenorrhea with sterility. All the suspensions done to relieve ordinary displacements will not cure this class of cases. All the ligaments on the front may be shortened and the floor repaired, but the case will not be cured. Dr. Reilly thought it strange that silk had continued to be used so long in these suspensions, as catgut would give rise to much less suppuration and afford all the fixation necessary. It had occurred to him that in the method spoken of by Dr. Ill the posterior parietal peritoneum is lifted from the fascia below more than is necessary, and that this may do harm. He wished to know whether the posterior parietal peritoneum is stripped from the round ligament as it is brought through. He had stripped the peritoneum back so that he had the clear round ligament. By so doing he thought that the pushing upward of the peritoneum can be avoided.

*Dr. Ill* said that removal of the ovaries is the operation most commonly performed for a short uterosacral ligament. In the physical examination, he said, the finger is passed into Douglas' cul-de-sac until it strikes the tense cord, which is slightly pressed upon and found to be sensitive. There should be in the pelvic cavity no organ sensitive to slight pressure; and when the uterosacral ligament is so, it is diseased. When the patient is put under ether, a finger is introduced into the vagina behind the uterus. The uterosacral ligament is caught on the end of the finger and is gradually brought outside. By massage, the ligament is lengthened, so that it is no longer tense and sensitive. As an additional safeguard against its contracting, it is kept on the stretch for a few days by thoroughly dilating the uterus. Dr. Ill always suggests that for two months following the operation the patients should use douches while on the knees and elbows, so

as to keep up a little stretching of the ligament. He has sometimes had to do the operation the second time; and once it had to be performed a third time. When the changes in the uterus are not extreme, such as those produced by a chronic displacement, the patient usually gets well. Two symptoms that should lead to a guarded prognosis are sensitive spines and coccygeal pain. The pain on either side of the back and inability to walk are overcome by the treatment.

*Dr. Richard C. Norris*, of Philadelphia, Pa., who was present, was invited to take part in the discussion, and said that sufficient stress had not been laid upon the preliminary treatment of the supports of the uterus and of the uterus itself. He stated that years ago Emmett had cured a great many cases of displacement by means of careful plastic surgery followed by the use of the pessary. The wider his own experience grew, the more he was inclined to think that these operations to correct displacement have but a temporary effect. In regard to the selection of the operation for this purpose, he was glad to have found that the consensus of opinion in the Medical Society of New Jersey was that the round ligament is the essential factor to be used, and that the portion of it that is the thickest and the nearest to the uterus is the one best fitted to accomplish the work. He was also glad to hear that ventral suspension or fixation should be discarded. At the Preston Retreat, in Philadelphia, there have been during the last fifty years 3,500 confinement cases; and Dr. Norris had found that in those in which ventral fixation had been used, complications in child-birth frequently occurred. This had led him to believe that this operation ought to be abandoned. Even the technique that prepares for a suspension, he said, may eventuate as a fixation. It is his opinion that an operation for holding the uterus in position by means of the round ligaments will be devised that will not fasten the uterus to the abdominal wall. He had had no difficulty in regard to sloughing or hernia in either the Gilliam or the Simpson operation. He had used the procedure suggested by Dr. Ill, which had appealed to him surgically and clinically as being the most satisfactory. He was surprised that the gentlemen had failed to appreciate the Alexander operation, as he believed that there exists a class of uterine displacements in unmarried women in which this operation finds a wide field of usefulness. When performed with careful

technique, there is no danger of sloughing or of infection.

Dr. Martindale, closing, said that if a vaginal hysterectomy is done in cases of procidentia, the condition will not be cured. It is absolutely necessary to do the plastic work before any of these operations are attempted, a point that he thought he had made plain in the paper. Dr. Ill had described a method of treatment for a tender and shortened uterosacral ligament. Dr. Martindale said that he would feel a little hesitation about employing this treatment unless it were done by a skilled operator; as some other structure might be mistaken for this, and damage might be produced by the massage. Dr. Martindale was not familiar with the Webster operation, and consequently could not speak about it. He thought that the proper treatment for a case of chronic metritis or salpingitis with adhesions would be supra-vaginal hysterectomy, which is a safer procedure than is double oophorectomy with an oophorosalingectomy. He had seen cases of inflammation of the broad ligaments and the ovaries in which, when the finger was pushed into the body of the uterus, the whole structure was found to be broken down. Dr. Martindale had seen the good effect of pregnancy upon a backward displacement of the uterus exemplified. One of the disadvantages of ventral suspension, he said, consists in the use of silk sutures. In the clinic to which he belongs the suture-material universally employed is catgut. He believed that the danger from the premature absorption of catgut is less than that from the presence of a foreign body, such as silk in the abdominal cavity. In many cases, the silk ligatures become infected and cause suppuration. Dr. Martindale thought that the reason women formerly did not appear to have procidentia was that they did not then consult physicians for this trouble; and that if they had, they would not have obtained relief. He had never done the operation for shortening of the uterosacral ligament, but had seen it done in three cases in the course of the operation for bringing the uterus forward. He wished to take exception to the attitude of both speakers in regard to ventral fixation, which he believed to be the operation par excellence in women beyond the climacteric; although he considered it criminal to do this operation on a woman during the child-bearing period. The suspension that takes in one or two strands of the muscle he thought more effective than the ordinary suspension in

which merely the peritoneum is used. In a large uterus with lax vaginal and abdominal walls, better support is afforded by ventral fixation than by any of the other operations mentioned. The sixth operation described by him is not the Simpson operation, but a modification of it devised by Dr. Charles P. Noble, of Philadelphia; it is quite similar to the operation described by Dr. Ill. If the ligament be taken up and drawn through the abdominal cavity, the inlet to the pelvis will be divided into three distinct artificial compartments. Dr. Martindale said that this is not anatomical, and is likely to produce strangulation of the bowel.

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The next paper on "*The Therapeutic Application of Dry Hot Air*," by Dr. Elton S. Corson, Bridgeton, was read by title.

Synopsis: Not generally scientifically understood and applied. Modes of application. Physiological action. Effect in special diseases. Contraindications. General considerations.

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"*The Drink Habit and Its Treatment*" was the title of a paper read by Dr. Charles A. Rosenwasser, Newark.

Synopsis: How established. Degrees of alcoholic craving. Classification of drinkers. Diagnosis. Prevention. Difficulties attending cure. Possibility and impossibility of cure. Treatment: Psychic; medicinal; hygienic; dietetic. Possibility and importance of treatment without detention. Importance of systematic treatment. Importance of coöperation of family. How to guard against relapse. Treatment by the State. The proposed State Hospital for Inebriates.

The discussion was opened by Drs. Livingston S. Hinckley, Newark, and Alex. Marcy, Jr., Riverton.

Dr. Hinckley said that the craving for something to stimulate one, occurring under certain conditions in the offspring of those addicted to the drink-habit, seemed to him to strengthen, rather than to disprove, the view that such a craving was a hereditary basis. Although it is true that crime is constantly committed under the influence of liquor, yet some of the most atrocious criminal acts have been committed by persons in whom and in whose families no trace of alcoholic indulgence could be found. Dr. Hinckley thought that few physicians whose practice had brought them in contact with the working class of a large city would be so radical as to wish to deny to these men the use of a stimulant that could for the time being produce a pleas-



urable relief from constant anxiety. Though total abstinence movements can do a great deal in the way of prevention, Dr. Hinckley thought that until a national edict against the manufacture or sale of alcoholics is passed, one cannot hope for much relief. Prohibition has met with great popularity, but drunkenness has not been materially decreased by it. The solution of the problem lies in education, he said. He has little faith in home-treatment for those severely affected, as personal restraint must also be provided. He referred to the proposed establishment of a State hospital for the care of inebriates and other drug habitues, a bill for which was introduced into the legislature of 1903, having been passed by the Assembly, but having failed to reach the consideration of the Senate. His experience had led him to believe that a separate institution for such cases should be maintained. The act should also provide for the voluntary commitment of drug victims and of psychopaths who feel the approach of mental deterioration. He thought that the members of the Society should aid in bringing the matter to the attention of the local medical societies and to that of the legal committees of the boards of trade in all towns and cities.

Dr. Marcy said that it was unfortunate that the Committee on Program had placed Dr. Rosenwasser's paper so near the end of the session, so that such a small number were present to listen to it; as the members of the medical profession are prone to ridicule the idea that they should take an advanced position in regard to this important matter.

He thought that all must agree with Dr. Rosenwasser that the Society ought to consider at once the duty of the State in regard to this problem; for the State certainly owes a duty to the unfortunate victim of the drink-habit. As alcoholic beverages are sold under a State license, the States becomes a partner in the pernicious traffic. Therefore, it should establish an institution for the special treatment of these cases; and it ought to go even further, and prevent the sale of alcoholic liquors. He considered it useless merely to recognize the evil effects of alcohol; and he thought it strange that the medical profession and the people generally should be willing to let this evil go on indefinitely, spending large sums of money for the care of the degenerate offspring of the victims and for the care of their own wrecked lives.

Dr. Drake agreed with the view that the drink-habit is a medical question, and said

that if alcoholism is a physical malady, it is a pathological condition. Function, he said, depends upon structure; and abnormal function implies the existence of abnormal structure. In this way, the heredity of alcoholism may be explained, as may the heredity of insanity. The drunkard produces pathological spermatozoa and he can thus transmit the craving for alcohol to his offspring. Dr. Drake believes that the time has come for medical men to stand together upon the floors of the various medical societies and to explain these conditions.

Dr. D. E. English said that habit means a cell-change; and that the alcohol-habit is as much present in the man that takes one glass of beer every night at bed-time and cannot be induced to go without it, whether it is harming his health or not, as it is in the man that takes forty glasses a day. Not all cases of inebriety, however, are in men with the alcohol-habit; although nearly all are. The proper treatment of a case not due to habit is similar to that of neurasthenia or insanity; but the treatment of habit is an entirely different matter. Throughout a long time, the cells have gradually acquired the habit of doing a certain amount of work every day. If this work is taken away, they crave it; and the only way to get rid of this condition of affairs is to force the man to refrain from the use of alcohol for so long a time that new cells which have not acquired this habit may grow in the places of the degenerate cells. Some cases of drink-habit can be cured in a month, and some only after three years of constant treatment. In some, the cells are so far degenerated that the patients can never be cured.

Dr. Rosenwasser, closing, said that the people can be educated upon this subject; and that probably this will be a simple matter, as there already exists in New Jersey a law regulating the education of school children concerning alcoholism. When a man has once got rid of the craving for stimulants, he ought to avoid everything that will arouse it again. Any highly spiced, irritating substance will have a tendency to do this. He said that voluntary commitments to the proposed institution would be provided for in the bill. He then exhibited to the Society some objects of interest in connection with the subject of stimulants and narcotics.

A paper on "*Incidence of Hydatid Disease in North America, with Report of Three Cases.*"—By Dr. G. N. J. Sommer, Trenton, was read by title.

Adjournment at 12.30 (noon).

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## THE EARLY RECOGNITION AND EARLY OPERATION IN ACUTE INTESTINAL OBSTRUCTION.\*

Robert Curts, M. D., Paterson, N. J.

*Senior Surgeon St. Joseph's Hospital.*

In the great volume of literature on this subject, the complaint common to each and every writer is, the *delay in operation*. One writer says "The facts, as to the decreasing mortality, in abdominal surgery, are definitely asserted, and still from one decade to another, the recorded statistics do not show a corresponding decrease, in the mortality of operative treatment of acute intestinal obstruction."

The onset is rapid, the symptoms obscure and quickly progressive, the death of the patient usually supervenes within two or three days, and the family physician finds himself making explanations to the relatives as to the cause of the sudden death. The life of the patient has been swept aside, with no warning shadows cast before, there is no period of incubation. Strong and weak alike may find themselves suddenly held in the vice of death. Such is the tragic picture common to many cases of acute stoppage of the bowels. One might feel confident in saying that every physician in this Society who has been in general practice at least a few years, has met with this experience and regretted that he had not, through an early diagnosis, offered to his patient the one saving chance of surgical intervention, or perchance of having

given him the very doubtful hazard of a delayed operation.

The recognition of the condition and the importance of the surgical treatment within thirty-six hours, is more the object of this paper than the elucidation of any thing that may be especially new, concerning the disease.

One cannot but feel that you will agree at least that the subject is of sufficient moment, and likewise difficult, for us to devote a portion of our time in the discussion of it. I do not hesitate to say my own experience has been so far from satisfactory that I always welcome a review of this question. It would be much easier and still more gratifying, to exhibit morbid specimens coming from the region of the gall bladder, the cæcum or the uterus and tell of successful abdominal sections, but such an infliction would be neither complimentary nor instructive.

In the whole field of medicine and surgery there is no disease which insists on the refinement of diagnostic acumen and the consequent dispatch in skill and treatment, *more* than stoppage of the alimentary tract. *This* is unquestionably one surgical condition with which the family physician should be familiar, for after all it is he who is first called upon to make the diagnosis. Fortunately the condition is not of every day occurrence in the practice of medicine as followed by the general practitioner, yet when records are examined, one is struck by its relative frequency.

In St. Bartholomew's Hospital, London, England, from 1892 to 1901, according to Lockwood, there were sixty cases, of which fifteen recovered. Nicholas Senn states that: "An examination of the statistics of

\* Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 19, 1908.



Leichtenstern shows that, external hernia and malignant tumors being excluded, one death from intestinal obstruction takes place in every three hundred to five hundred deaths from all causes in hospital practice. This statement is based on the records of a large number of hospitals in London and on the continent.

"Hilton Fagge has shown from the examination of the records of Guy's Hospital from 1854 to 1868, that fifty-four or one-fourth of one per cent. were cases of intestinal obstruction. Heusner, from his own investigations regarding the frequency of intestinal obstruction, maintains that annually out of every one hundred thousand, from five to ten suffer from ileus, and one out of every three hundred to five hundred deaths is attributable to this cause."

From an anatomical point of view there are few positions within the abdominal and pelvic cavity where the affection may not occur, however there are certain varieties which have a predilection for particular regions, and a clear knowledge of the anatomy of the abdominal viscera is essential if we are to make any attempt at localization. The diaphragm may rarely be involved, usually, however, any part of the abdomen situated below a line corresponding to the upper border of the transverse colon, may be the seat of obstruction. The jejunum and ileum with their broad mesentery, permitting considerable change of position, unlike the fixed duodenum, are very liable to become ensnared in an organized adhesion.

The sigmoid with still broader mesentery, finds ample room to turn—thus causing a twist. The cæcum with the attached appendix, in the right iliac region is frequently the source of trouble. In many instances the normal anatomy becomes much distorted, so that familiar landmarks are no longer an indication of the exact position or relation of the viscera. Still it is helpful at times, to have a definite knowledge, or at least a good mental picture of the relation of the intestines. In this connection, it would be very profitable for us to avail ourselves of every opportunity possible, to take a look in the abdominal cavity at autopsies, and refresh our memories as to the position and relation of the viscera, once familiar to us in student days. This may be further studied by the formation of anatomical clubs, as amply provided for, by state legislation.

The purpose of this paper and the required brevity, does not admit of a detailed description of each form of acute obstruc-

tion. Classically, excepting hernias, they are named according to the cause. Volvulus, or twisting of the intestine, occurring commonly in the sigmoid and rarely in the small intestine. Stricture of the bowel occurring in the large or small intestine, with ceration, or a reduced strangulated hernia and other forms of injury and disease. Fecal impaction confined usually to the large intestine and cæcum. Gall stones coming into the canal by direct course from the common duct, or ulcerating their way through the gall bladder and intestinal wall; the smaller often forming the nucleus of the history of some previous lesion as ul- large enteroliths.

Peritonitis with its consequent adhesions and fixation of the gut in abnormal relations and occasionally post operative. Bands the result of organized intestinal adhesions with a previous history of peritonitis.

Meckel's diverticulum, appendices epiploicae, and the appendix vermiformis, causing obstruction by adhesion of their distal portions. Intra-abdominal hernia where the loop of intestine passes through small slits or aperatures in the omentum, mesentery, or foramen of Winslow, usually following traumatism, and finally all forms of external strangulated hernia. Add to these intussusception in which the primary cause has not been well defined, but which we know is found commonly in children and rarely in adults.

The relative frequency of different kinds of acute obstruction, with the attending mortality in operated cases, has been shown by Charles L. Gibson, in 1,000 cases collected from his own service and other sources, and reported in the annals of surgery. They are classified as follows:

	Mortality.	
	Cases.	Per Cent.
Strangulated herniæ . . . .	354	37
Intussusception . . . . .	187	50
Bands . . . . .	186	41
Volvulus . . . . .	121	54
Meckel's diverticulum . . . .	42	62
Gall stones . . . . .	40	57
Slits or aperatures . . . . .	34	62
Foreign bodies . . . . .	16	25
Diaphragmatic hernia . . . .	6	100

Contractions by the vermiform appendix, occurred seven times with two deaths. In this collection it is interesting to note that apart from strangulated herniæ, a very considerable percentage of cases were due to intussusception and strangulation by bands. Of the 187 cases of intussusception 81 were in children under one year of age; 49 were

in children under ten years of age; while those produced by bands there were but 4 under ten years of age, the greatest number being at 43 years.

Clinically we are taught to classify intestinal obstruction as either acute or chronic, and while the pathology justifies this division, we frequently find that one condition may result directly from the other. This is especially so in such instances as stricture or pressure by a malignant growth, which may have been under observation for some time. In these secondary acute forms, inasmuch as the primary cause has been usually diagnosed, the process leading up to complete stoppage of the fecal current is gradual, and we are forewarned, consequently operative treatment is indicated long before final occlusion of the lumen occurs.

The recognition and the management of acute ileus, where there have been no premonitory symptoms, is the physician's difficulty, and the patient's necessity. In the rapid advances made in recent years, in all departments, the field of the physician and that of the surgeon is being more clearly defined, but this division of labor between general medicine and general surgery, applying especially to treatment, gives no relief to the responsibility in diagnosis. Most acute conditions of the abdominal viscera, naturally come first under the care of the family physician. This is particularly true of those which are not traumatic. The clinical pathology of the abdomen does not always necessitate surgical intervention, but in the interest of the patient, it should be recognized when such treatment is required. The question has been asked, as to where the physician's knowledge ends and that of the surgeon begins, in the diagnosis of surgical diseases. In answer it would seem fair to say, that the physician should be as well informed in anatomy, clinical pathology and diagnosis as the surgeon. Too little attention is given to the study of surgical diseases, and still less to their diagnosis, by the general practitioner. A full appreciation of this statement is necessary, and must be generally accepted, if we are to entertain the hope of materially decreasing the death rate in many surgical diseases. This is perhaps best illustrated by the subject in hand, for one can think of no other surgical disease, with which the family physician is brought in contact, that requires less prescription writing and greater skill in diagnosis.

There are few conditions in which the complexus of symptoms is so misleading,

and oftentimes obscure, where hesitation and doubt mingled with a feeling of keen responsibility, fill the mind, and where more disastrous results await the patient through delayed operation. This delay is born of the hope, that the intestines may at any hour resume their normal functions. In the face of doubt there is hesitation to recommend abdominal section, and often after both physician and surgeon have decided the question, the friends insist on holding off another twenty-four hours. Winslow quotes that 80 per cent. of patients should recover if properly treated. The prognosis is always grave, but in surgical treatment lies the only hope.

During the past year, much of scientific interest has been brought out. The sensation of pain in its relation to the abdominal viscera and the parietal peritoneum has been studied by Lennander of Sweden. His conclusions pointed out that those parts supplied by the vagus or the sympathetic, could not give rise to the sensation of pain. That the sensation of pain in the abdominal cavity, was conveyed directly by spinal nerve endings in the parietal peritoneum—the visceral peritoneum not being capable of experiencing the sense of pain. Other authorities however differ with these conclusions. The experiments of McClure, of Baltimore, have shown a marked difference in the symptoms produced in dynamic ileus, in the upper portion of the jejunum, and a similar type having its origin in the lower part of the small intestine. Those cases in which the mechanical obstruction occurred in the oral, suffered more intensely and were more quickly fatal, and where like mechanical occlusions occurred in the aboral portions.

The work of Cannon and Murphy has contributed much information of practical value, concerning the physiology of Auerbach's plexus and the splanchnics, and their influence on, and control of the peristaltic wave. J. W. Draper Maury, by a series of experiments in the surgical research laboratory of Columbia University, believes that death in intestinal obstruction, situated within the duodeno-jejunal portion, may be due to the absorption of bile or its toxic elements.

Beer and Eggers have recorded their experiments and the observation of others, in refuting the dictum laid down by Wilms in his authoritative treatise on ileus, that, "Anti-peristalsis, that is, an evident upward peristalsis, driving the contents of the bowel



towards the pylorus, and not towards the anus, does not occur." They have clearly demonstrated, it would seem, that such a conclusion is erroneous, and support our former views, that anti-peristaltic action of the intestines is the direct cause of fecal vomiting. The painstaking work of these investigators, has added greatly to the store of our scientific knowledge and let us hope it will contribute to the foundation upon which we may build a better clinical structure for use at the bedside. The deductions are all right as far as they go, but have added little that may be applied clinically, so for a time we must resort to such aids in diagnosis as we already possess.

Although coming properly within the scope of this discussion, I will pass over the consideration of obstruction by external strangulated hernia and refer but briefly to acute intussusception. Of the latter type Osler says: "It is an affection of childhood, and is of all forms of intestinal obstruction the one most readily diagnosed." It is not uncommonly observed, that in the minds of many, this invagination of the bowel is associated with adults. It should be remembered that the condition is found almost altogether in children and occurring but rarely after the age of ten. Of this variety it may be said, that it is perhaps the only one in which the pathology and anatomical location can be made out, with a reasonable degree of certainty. As recorded by Treves about one half of all cases are located at the cæcum, about one-third in the small bowel, and one-fifth in the large bowel. Watson Cheyne says: "Acute intestinal obstruction in infancy without an external hernia is practically always due to intussusception."

Many of the symptoms common to all forms of ileus are present, but the diagnosis is based on two distinctive signs—the passage of blood and mucus with a constant tenesmus. The patients having presented evidence of pain and collapse, we at once make examination of the abdomen and in most instances are able to palpate a tumor. Rushmore, Clubbi and Osler all state that a mass, on careful examination, can be made out in 90 per cent. of cases. Oftentimes in children, and occasionally in adults, it may be necessary to administer an anæsthetic. Given the diagnosis, and rapid treatment, fully two-thirds of these cases should be saved, and here I wish to say that in all patients suffering from intussusception, the treatment should be immediate abdominal section. The mechanical nature

of invagination naturally suggests the possibility of relief by mechanical agents, and this not without logical reasoning, for when we consider the pathology, it would seem quite possible that the injection of water or the inflation of the bowel through the rectum by means of air or gas, would straighten out the gut, and that this does actually happen in some instances is possible. However this may be, the objections it seems to me are so valid, *that the method should be absolutely discontinued.*

The chief point against the whole procedure is the fact that after the patient has been subjected to the treatment, we never know whether the intussusception has been completely or only partially reduced, and in the meantime there has been great loss of time and increased shock to the patient, with probable occurrence of the invagination, and that by these methods the type situated in the small intestines cannot be affected.

In the face of these difficulties, dangers and uncertainties, it would seem that better discretion obtains, where the case is given the opportunity at the beginning, of abdominal section. It requires laparotomy to determine the nature of the pathology. The invagination may prove to be irreducible, by any method, we must have recourse to resection of the bowel. In gangrenous forms there is increased danger of producing rupture or perforation by use of liquids or inflation under pressure, and inasmuch as spontaneous cure may rarely result from the gradual separation of the gangrenous gut, it would be much wiser for the doctor to institute no treatment whatever and leave the patient to nature's care than to use this method of procedure. It appears obvious that the scientific conduct of the case would be to open the abdomen and apply proper surgical methods.

Having set aside all forms of external strangulated hernia and spoken of intussusception as a special type of internal obstruction, I wish now to discuss the management of acute intestinal obstruction, as induced by all other phases of intra-abdominal pathology. For purely clinical purposes it is well to keep in mind these three divisions; *first*, external obstruction, as by hernia; *second*, intussusception; *third*, internal obstruction having any cause other than intussusception. Let us endeavor to consider the third division in a practical way in order that as many as possible may be placed on the operating table at a time when surgical treatment will save the life

of the patient. Heretofore by far too many have been given the chance as a last resort, and the frequent outcome has been only a valuable contribution to pathology as worked out in the morgue.

In this last division we necessarily include volvulus, fecal impaction, gall stones, enteroliths, kinking of the bowel, hæmatoma, thrombosis, constriction by bands, by the appendix and Meckel's diverticulum, peritonitis, any form of internal hernia, traumatism and every other form of acute pathology that causes occlusion of the lumen of the gut, except that of groups 1 and 2. Too frequently time is lost in the vain and fruitless effort to diagnose one or the other of these different types. The classical symptoms of pain, vomiting, collapse, distention and constipation, are all common to most varieties, and not only to these but to many other pathological conditions within the abdomen where acute obstruction does not exist. In fact, I have seen all these exhibited in a patient suffering from hysteria. They are generally present in an acute attack of appendicitis, and when we think of the cæcum as being a frequent point for the occurrence of obstruction, it may be very difficult to quickly differentiate.

Severe intestinal colic, and at times biliary and renal colic will lead to confusion in our effort at diagnosis in the earlier stage, for there may be little or no difference in the onset. Dr. Hale White says: "There is perhaps no ailment in which the diagnosis is more important than in colic. Many a patient who has died of peritonitis, acute intestinal obstruction or appendicitis, might have been saved had he not been treated at first under the impression that he was suffering from colic due to irritating food." And further, "That apart from lead poisoning, severe intestinal colic in adults is a much more rare event than is ordinarily supposed." Under usual circumstances the medical attendant when called to see a patient suffering from the usual symptoms of severe colic accompanied by constipation, feels that he has performed his full duty in prescribing an opiate and administering a cathartic. A few hours later, if the case proves to be intestinal obstruction, the treatment is not only wrong but is a factor in the cause of death.

Hence it would seem that every time we are called to see a patient suffering from abdominal pain, severe in character, we should not rest until we have eliminated every possible chance of having to deal with

acute ileus. I mean by this, and wish to emphasize, that in every instance of severe pain emanating from the abdominal viscera, unless the cause is clearly evident, the patient should be examined at very short intervals, and if necessary the physician should remain with the patient for hours at a time. Further I would lay much stress on the oft-repeated injunction, that opiates inveigle us into a false sense of security, and purgatives are not only useless, but add to the discomfort and danger, should we find later that we are dealing with acute stoppage of the fecal stream. Taking the entire group of the third division, it is quite impossible to make a positive diagnosis of any particular type before operation, and also quite unnecessary to attempt to do so, for it will not only delay what should be an early operation, but will frequently cause the doctor much chagrin and loss of conceit, as to his diagnostic ability.

The physiology of the intestine and the normal functions as they exist in any one who may be considered in good health, must be appreciated in order to recognize any deviation from a normal to a pathological state. Briefly, I desire to make mention of such definite and absolute conditions as concern us in the diagnosis. Tersely stated, the intestines receive their blood supply through the adjacent mesentery; the wall of the intestine receiving arteries at frequent intersections. The peristaltic waves are continual during the presence of digested or undigested food and gases—gases are normally present at all times in the intestine. By the action of the digested ferments and bacteria, we are continuously having decomposition and the resulting formation of gas. These gases, which consist of several chemical varieties, are always present and should readily pass from any one coil downward to any other portion. *Any condition causing complete obstruction to the passage of gas constitutes acute intestinal obstruction.* The cause may be within the lumen, within the wall, or external to the wall or a combination of these. Gas in excess of the usual amount, with meteorism, is commonly increased by the more intense bacterial action through the destruction of the circulation, within the area affected by the obstruction. In determining the diagnosis, if we attempt to follow the usual train of symptoms given to us by many authorities, we are apt to lose valuable time before the complete syndrome has manifested itself to our entire satisfaction.

What methods then shall we use which



shall be applied in all cases of the third group, in determining at the bedside whether the patient has or has not complete stoppage of the fecal stream? In answer I would submit but two symptoms: first, the presence of severe abdominal pain; second, inability to pass flatus. The first is always present, but common to many diseases of the viscera, but the second is true only of acute obstruction. When these two symptoms have been observed, the patient should be given surgical treatment at the earliest possible moment.

There are many other symptoms which may or may not be observed within the first twenty-four hours. These are, however, only valuable as being confirmatory, and include visible peristalsis, fecal vomiting, shock, collapse, constipation, subnormal temperature, strangury, intense thirst, rhythmic pain, and abdominal distention. Any one or all may be present, but those that are characteristic of ileus are frequently late in making their appearance. Unfortunately too, those that appear early in the condition are also present in many other abdominal diseases, both medical and surgical. Hence to place definite reliance on them within the first twenty-four hours is very apt to lead to confusion and hesitation. Up to the present time the clinical laboratory, which has helped us so greatly and lightened our responsibility in other diseases, cannot be relied upon in either making or confirming a diagnosis.

The diagnosis as suggested by the patient is often worthy of our notice. We are told in all earnestness, that if a movement of the bowels could only be obtained, everything would be all right. Recently after a gastro-jejunostomy for pyloric stenosis, although she knew nothing of the technic employed, the patient expressed herself as being comfortable except for a sensation as though the bowel were kinked. Complete constipation as a symptom may cause some perplexity, and can be misleading in several ways. It may be there are those among us who would feel more relieved than the patient, if one fairly good movement of the bowel is obtained. Here it should be remembered that unless the obstruction is situated at the sigmoid, the first enema may cause the expulsion of fecal matter. It is noteworthy also that in women especially, constipation may obtain for many days or even weeks without serious discomfort. There is a false notion prevailing among a few that somehow if they can only completely empty the bowels there will be

a relief or cure of a suspected obstruction, thus too frequently assuming the cause to be fecal impaction. It is well to keep in mind that fecal impaction comes on gradually, and that it is rare to have this as a cause of complete acute obstruction, where there has been a normal daily movement. Furthermore it is erroneous to be possessed of the idea that the presence of feces in the bowel in other types, is particularly harmful, and that we should move, not only the bowels but heaven and earth, to purge them of solid matter.

Every hour more serious pathological changes are taking place in the wall and circulation of the bowel, leading up to gangrene, and general peritonitis accompanied by exhaustion and increased shock. In complete obstruction, during operation, it may be commonly observed that the intestines are apparently quite free from the presence of feces, and yet all the symptoms from the onset were unaltered by the bowel being emptied.

The symptom of vomiting is one of the most important phases, according to most text books, and when taken as a part of the syndrome it is valuable. But to rely on this symptom or be governed by it, other than to arouse our suspicions may lead us astray, and act as one of the causes of delay. Vomiting associated with pain and collapse may rise from acute pancreatitis or pancreatic hemorrhage, appendicitis, renal or bilious and gall stones colic. These and other abdominal conditions are apt to exhibit the same effect on the stomach and its contents, as does intestinal obstruction in the early operable stage; that is, within the first twenty-four or thirty-six hours. Fecal vomiting, which is looked upon as diagnostic, usually occurs too late in the train of events, to serve our purpose, for if the obstruction be at or below the cæcum, fecal vomiting may not arrive until many hours after the onset. When the cause of occlusion rarely happens to be at or near the duodeno-jejunal portion, then the vomiting is generally earlier and is more intense. We cannot forget also that vomiting is greatly influenced by the nervous temperament of the patient. Fecal vomiting is of course pathognomonic, when it does occur, but when the patient appears to be vomiting everything in him not fecal, we should not assume that obstruction is not present.

The purpose of the enema is rather to establish the diagnosis than to empty the bowel. However, before using this test we must make the usual methodical examina-

tion required in all abdominal diseases. Careful notes of the history of the present condition together with symptoms should be made. Then the previous history, the habits of the bowels, the previous existence of malignant tumors and growths in the pelvis. The history of attacks of peritonitis should be carefully noted, and elicit as far as possible any apparent cause. Next, the physical examination beginning with the stomach and liver and gall bladder, then the kidneys, and lastly the large and small intestines and pelvis. Care should always be taken to at once exclude all forms of external hernia. A digital examination through the rectum and vagina must always be carefully made. By these methods it should not be difficult to exclude all those causes included in groups one and two.

We then proceed to exclude group three by the enema test for the passage of flatus. This test is made by three enemas, the first two without and the last with anaesthesia if necessary. The first enema may consist of one quart of soapy water, one dram of turpentine, two or three ounces of glycerine, and one ounce of sulphate of magnesia. In this as in others that follow, it is most important that the injection of air should be carefully avoided. In one to three hours this may be repeated, and finally at the end of five or six hours, unless there is entire relief of symptoms, the third enema—consisting of normal salt solution, two or three quarts, turpentine two drams, glycerine two ounces—should be carefully administered under an anaesthetic, and if there be no return of flatus the diagnosis of acute obstruction is the result, and without waiting longer to determine the nature of the cause, we proceed at once to prepare the patient for laparotomy. Sterile water may be substituted for normal salt solution. This test—of enemas—should be made by the physician himself or by a trained nurse in his presence, and he should make a personal observation of just what happens on the return of each enema. The rectal tube passed beyond the sigmoid flexure, may be used. The treatment is abdominal section, and consists in finding the seat of obstruction, dissipating the cause, and repairing the damage done.

The damage to the viscera usually varies according to the length of time, which has been allowed to elapse between the onset and the diagnosis. In those more fortunate cases where the diagnosis is made within the first twenty-four hours, the surgeon has only to deal with causes, but in delayed

cases, he has the effects and complications added which increase the hazard of the operation. William J. Mayo says: "A frequent necessity of resection for the relief of intestinal obstruction is a somber commentary on the diagnostic ability of the profession." In the early cases the cutting of a band constricting the gut, the untwisting of a volvulus, the reduction of intussusception and many other simple procedures, may be all that is required and the affected viscera rapidly regains its normal state. In those cases where the constriction or twist or other cause has been allowed to remain a sufficient length of time to destroy the vitality of the bowel through interference with the circulation, producing gangrene, the portion so destroyed has to be resected. The operative treatment consequently varies greatly with the conditions found.

Under favorable conditions large portions of the intestinal canal may be resected without any appreciable harm to the individual. I have a number of times witnessed Mr. Lane in Guy's Hospital remove the entire colon for the relief of chronic constipation. The recorded work of Murphy, Moynihan, William J. Mayo and many others in recent years show the great range of possibilities in successful resection of the intestines. Generally lateral anastomosis can be more easily and safely performed. Some prefer end to end anastomosis for the large bowel. Where the bowel is distended the evacuation of the liquid and gaseous contents by opening the intestinal wall will facilitate the progress and ease of surgical procedure.

In those cases where the operation has been delayed and the patient comes to the operating table in a state of great collapse and exhaustion, with the prognosis exceedingly grave, perhaps the old diction, "Least done, soonest mended," should apply. At any rate the mortality is so great, the undertaking so hazardous that the surgeon hesitates to do the operation, yet there is a chance. This must consist in some rapid method, such as the forming of an artificial anus above the seat of obstruction, or as Watson Cheyne recommends, pulling out the loop of distended bowel and placing therein a Paul's tube to establish a fecal fistula. He states, "That it is most remarkable what a large number of cases have recovered after a temporary measure of this kind."

The administration of the anaesthetic should be given, if possible by one who is accustomed to giving ether and chloroform,



for in such cases as keep up persistent vomiting, the vomitus may be drawn into the trachea and cause death. It is well in every instance to wash out the stomach a few times before commencing the operation. The after treatment is much the same as after any severe abdominal operation. Stimulants, as whisky and saline, by the rectum and strychnine hypodermically. The use of morphine only occasionally for the relief of pain. William J. Mayo advises the semi-sitting posture for several days, the use of the Murphy rectal infusion of salines and at the same time frequent irrigation of the stomach with hot water.

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## DISCUSSION.

**Dr. T. W. Harvey, Orange.**—A most interesting fact in this discussion is that the diagnosis of intestinal obstruction is made much less frequently to-day than it was twenty years ago, and that operations for relieving such obstruction are much more uncommon than they used to be. In other words, as our diagnosis improves we find that obstruction is but one factor in the symptom complex, and that we are more often able to recognize a curable cause, and our treatment is influenced accordingly. Early operations for abdominal symptoms has eliminated many cases of intestinal obstruction by anticipation. Many cases of intraperitoneal inflammation were formerly allowed to go on to obstruction which now are cured before that symptom appears. Similarly many new growths which are liable to cause obstruction are removed before it occurs. On the other hand a new fruitful cause of intestinal obstruction is presented by the after effects of laparotomies. We have first those obstinate cases of obstruction due to paralysis of the intestines caused by the traumatism or nervous shock. Later we have the peritonitic exudations due to post-operative inflammation, and still later the bands that form after such inflammations have subsided.

These latter form a most interesting group because of their multiform character, and the good results that usually follow proper treatment. In one of my cases a slender cord three inches long extended from the tip of the appendix around a portion of the ileum and was attached to the mesentery, this was not, however, post-operative. In another case where the abdomen had been opened for a pelvic inflammation two

years before a band was found encircling the small intestine, which connected an enlarged gland in the mesentery with the omentum. Apparently these bands may exist a long time without causing any trouble and then, from some accidental cause, the bowel becomes strangulated at that point.

The value of early diagnosis and prompt interference is particularly apparent in the cases of intussusception. In my experience operations to be successful must be done within the first twenty-four hours. I do not see the advantage to-day of attempting any of the methods of forcible reduction in these cases, or of volvulus, by injecting water or air. I very recently successfully operated on an infant who was but eight months old for intussusception, where the effects of the operation were very slight. The operation was made six hours after occlusion had taken place. Certainly I think that the child ran less risk from the section than it would have had it been subjected to prolonged attempts at reduction by an unknown pressure of water or gas.

A most important point to decide in operating for intestinal obstruction is, whether one shall do a complete or incomplete operation; whether a colostomy or a resection. No imperative rule can be laid down here, each case must be judged by itself. Another point to be determined after opening the abdomen is, what is to be done to insure the return of normal peristalsis, and just how much evacuation of the distended bowel will be required even if the obstruction is relieved, and on this determination the success of many an otherwise successful operation depends.

**Dr. James F. Brown, of Montclair**, said that a phase of the treatment of intestinal obstruction to which the attention of the Society should be called is the treatment of distension. He knew of no more hopeless condition than to maul over an immense number of intestinal loops, that are distended and inflated with gas, and seek for the cause of the obstruction. Dr. Brown said he wished to call the Society's attention to the use of Moynihan's tube—a tube about half the size of the normal small intestine was placed in the intestine, and the intestines are strung on the tube. By using this tube one can flatten the abdomen, so that, after this simple procedure, instead of having a mess of distended intestines, the gut is flat. The abdomen can then be entered with comparative ease to seek for the cause of the obstruction. This trick had been called to Dr. Brown's attention last summer, and he first saw it used at Dr. Mayo's clinic. He considered it a satisfactory procedure, and thought that anyone that had never used the tube in this class of cases would be gratified with the effect of its use after having become accustomed to it.

In a case of appendicitis, there is great significance in the disappearance of a Head zone which had been present but a few hours before. It means that the tension on the serosa of the appendix has lessened. The natural conclusion to draw is that the appendix has ruptured.—*Amer. Jour. Surgery*.

One should not try to force his way into an auditory canal without first making sure that the patient has no disease of the external ear. The examination under such circumstances will only aggravate the condition.—*Amer. Jour. Surgery*.



A CASE OF EXCISION OF THE STOMACH FOR CARCINOMA  
Reported By Edward Staehlin, M. D., Newark, N. J.



A. SCIRRHUS CARCINOMA OF PYLORIS  
B. LEIOMYOMA





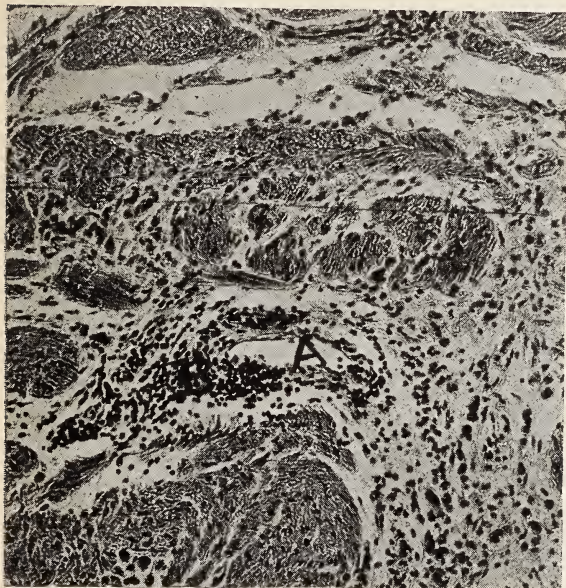
A. SCIRRHUS—LAID OPEN

B. LEIOMYOMA



## A CASE OF EXCISION OF THE STOMACH FOR CARCINOMA.\*

Reported by Edward Staehlin, M. D.,  
Newark.



B.—Scirrhus Carcinoma, showing epithelial cells in small groups, scattered through a stroma of dense fibrous tissue. A.—Blood Vessel.

Mrs. B. S., a widow, 53 years old, a mother of eight healthy children, and herself one of eight children, her mother and father living; began to suffer with indigestion three years ago, which became more and more distressing as time went on so that solid food was gradually eliminated from her diet. Shortly, even milk and water became distressing. She lost weight rapidly, and six weeks prior to her operation she lost weight at the rate of three pounds per week. From a state of corpulence she had become emaciated to a marked degree, and her color changed from a ruddy hue to a yellowish grey.

Her abdomen was flabby and easily palpated. In the epigastric region, to the right of the rectus, could be made out a mass the size of a Bartlett pear. This mass was smooth and movable. On inflating the stomach the mass seemed to bound a largely dilated stomach to the right.

Diagnosis: Carcinoma of pylorus with stenosis.

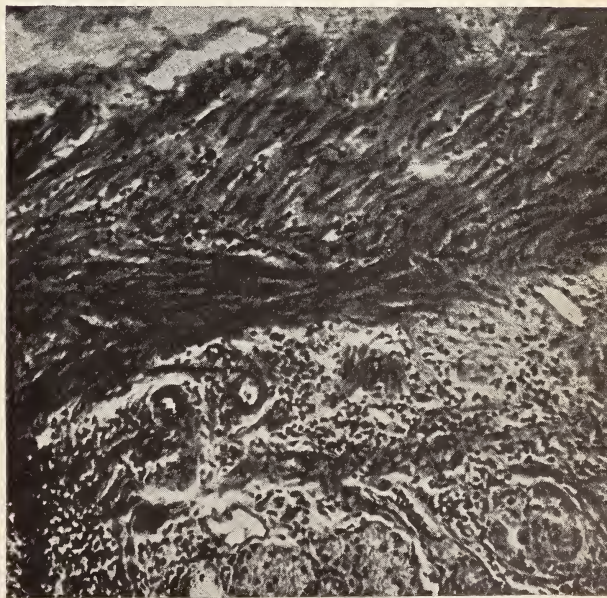
Operation May 6, 1907. An incision six

inches long was made through the right rectus, beginning at the free border of the ribs, the peritoneal cavity was opened and the abdominal contents explored.

The tumor involved the pylorus. It was as large as a good-sized Bartlett pear, smooth, and there were only a few adhesions. The glandular involvement was moderate. As the stomach was drawn out of the abdominal cavity an ugly looking nodule, the size of a hickory nut, was discovered on the greater curvature, five-eighths of the distance from the pylorus.

On account of the widely separated distribution of these growths and the diversified lymph drain I could not regard the nodule as a metastatic growth and concluded rather that there were two primary cancerous growths. It was then at once decided to remove the pylorus with the greater part of the stomach.

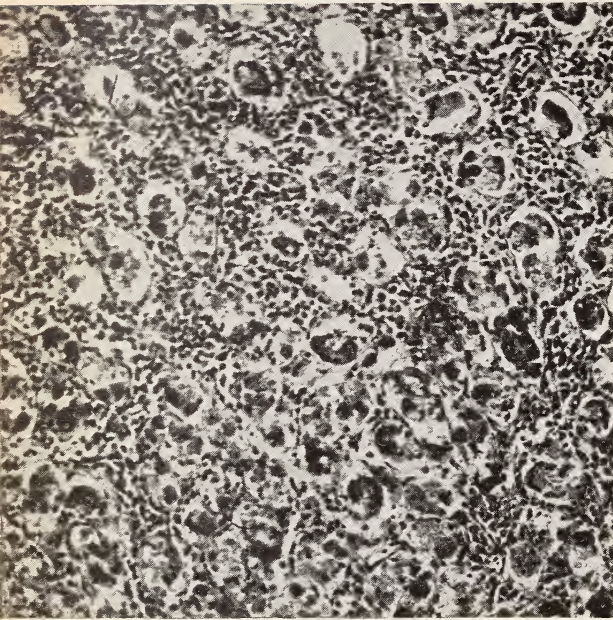
The vessels of the stomach were ligated one by one; the gastric, the pyloric, and the right and left gastro-epiploic. The veins were included in the ligatures. The gastro-hepatic omentum and gastro-colic omentum were divided as far away from the stomach as possible so that the glands would all be removed. After the pylorus was perfectly freed, clamps were applied as they were also to the extreme other end of the stomach, and the pylorus and five-eighths of the stomach were then removed. Because of the great relaxation, an end-to-end anasto-



Edge of Duodenum. Simple round cell infiltration.

\* Presented at the 142nd annual meeting of the Medical Society of New Jersey, Cape May, June 18, 1908.





Mucosa from edge of cardia next to leiomyoma, simple round cell infiltration.

mosis was made in the following manner—the remaining portion of the stomach and duodenum were so approximated that the lower border of the remaining portion of stomach was on a level with the lower border of the duodenum, and the excess of lumen of the remaining stomach, which protruded beyond the upper border of the duodenum, was closed.

A double tier of sutures was used, celluloid thread was the material. The gastrocolic omentum was sewed by means of interrupted catgut sutures to the lower border of the duodenum and what remained of the stomach. The gastro-hepatic omentum was similarly approximated above.

She made a most uneventful recovery, and was discharged on the nineteenth day after operation, with the following twenty-four hour diet: One and a half quarts of milk, three pieces of toast, three soft boiled eggs, and two cups of chicken broth.

The pathological report proved the pyloric tumor to be a scirrhus and the nodule a leiomyoma.†

\* Scirrhus Carcinoma: The epithelial cells in small groups scattered through a stroma of dense fibrous tissue. Sections made from the margins of the specimen were free from carcinoma. The small mass on the greater curvature was a leiomyoma. Composed of smooth muscle fibre.—Dr. Otto H. Schultze, Cornell Medical College.

† The photo-micrographs were made by Dr. L. Jaches, Loomis Laboratory, New York.

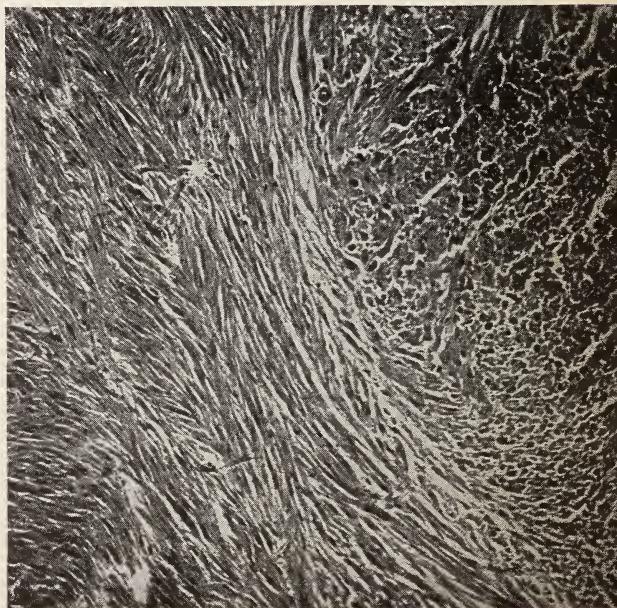
At the time of writing this report (May 13, 1908), she is in excellent health. Her buoyant disposition has returned, and her weight and appearance are normal. Her endurance for work is as it was in perfect health, and she has resumed her household duties.

Her diet is a general one, but limited in the amount taken at one time. She eats "often and little."

#### DISCUSSION.

Dr. John P. Reilly, of Elizabeth, said that he would like to ask Dr. Staehlin to give the result of the chemical analysis of the stomach before he performed the operation.

In connection with the case, Dr. Reilly referred to the difficulty in determining the condition of the stomach from any analysis that is at the command of the profession at the present time. He had in mind a case that from the chemical analysis, and from every symptom, objective and subjective, apparently was one of carcinoma of the stomach. The patient was emaciated almost to a skeleton. There was the regurgitation of sour food and belching of gases, at times vomiting all the food—absence of hydrochloric acid, lactic acid present—diminished total acidity. The diagnosis from this alone, from all the information given in literature, and from experience in practice would have been carcinoma. The diagnosis, however, was disputed by a good internist, who said that it was a case of simple nervous origin, and advised the patient to re-swallow the food. The patient has, since doing this, taken on weight, but still vomits food. This treatment has been going on for two months. She has gained in weight, and is now attending to work. The point of diagnosis on the part of the internist was that no tumor was palpable. This, in Dr.



Leiomyoma. Smooth muscle fibre.



Reilly's opinion, was bad teaching. A diagnosis ought not to be made on this ground, unless it can be substantiated by some other means; because, with all the symptoms that are known to make up a cancerous condition, even with the absence of a tumor, the diagnosis of carcinoma should be possible. (Six months has now elapsed and patient seems well. September, 1908.)

The physician must be able to make out the diagnosis long before a tumor appears, if any good is to be done by operation. Therefore, it is unfortunate that there is no way of determining in such a case whether cancer is present or not, except on the ground that no tumor is palpable. Dr. Reilly said that he would like to report two striking cases of cancer of the stomach. These cases were misleading because they both had a running temperature. One patient was a young physician, house-doctor in the hospital with which Dr. Reilly is connected. There were very few stomach symptoms in his case; a little distress, no vomiting, and a running temperature. Finally a celebrated internist was asked to see the patient; the diagnosis of paratyphoid fever was on the running temperature, and the absence of typhoid reaction on test. The patient finally vomited blood; an incision showed cancer of posterior wall of stomach.

Dr. Reilly had a similar case shortly after this. He remarked that the literature of the subject is not full enough on the temperature that accompany such cases.

**Dr. James T. Wrightson, of Newark,** said he regarded this as a very interesting and remarkable case. He thought that the fact that the patient had had five-eighths of her stomach removed, and yet the digestive processes were carried on so actively that she had regained her health, vigor and flesh, opened up a fresh field for thought in regard to the digestive tract.

**Dr. Staehlin,** closing, said that there was a tumor, and that an analysis of the contents of the stomach had proved positive. Even, however, had the analysis been favorable, he would have concluded that an operation should be performed. He had repeatedly found, on having the stomach contents examined, that the results of such an analysis are not very reliable. Very often, in the absence of hydrochloric acid, there is no cancer present; and when hydrochloric acid is present, there is sometimes cancer. In this case, however, the tumor was so well defined that it was easy to arrive at that conclusion. He thought that in cases like Dr. Reilly's, in which there is such a severe manifestation of malignancy, he would suggest an exploratory incision, unless the patient were cachectic and he was sure he could accomplish nothing by operating; because sometimes the stomach is high up, and the tumor cannot be felt through the abdominal wall, though one exists.

A large, slowly healing superficial ulcer of the leg may be due to a thrombosis of one of the small vessels leading to that part. Of course, syphilitic etiology must first be ruled out.—*Amer. Jour. Surgery.*

Persistent, remittent fever after an acute infection of the knee joint is usually due to a systemic invasion. Such cases are best treated by laying the joint wide open (Mayo operation).—*Amer. Jour. Surgery.*

## REFLEX GASTRIC SYMPTOMS A FACTOR IN SURGICAL DISEASES OF THE ABDOMEN.\*

By John P. Reilly, M. D., Elizabeth, N. J.

*Visiting Surgeon to the St. Elizabeth and Alexian Brothers Hospitals, Elizabeth.*

Few achievements in modern medicine have given more satisfactory results than the development of methods by which the obscure diseases of the abdomen could be diagnosed in their early stages.

We all recognize the importance of this, because the earlier that help can be given, the better for the patient; then, too, it tends to place medicine in a more creditable position. Most of us remember the time when obscure diseases of the abdominal cavity were the cause of sharp differences of opinion, by good diagnosticians, while the real pathology was made clear by the revelations of the dead-house only. This was a time when a young man who could take advantage of gross pathology in some foreign city and thus become a better diagnostician, was much envied. This pathology failed in its practical results, because too long a time often existed from the onset of the disease, to the end, and too many changes had taken place from the early symptoms to those in the later stages, to be of much help.

The improvements along this line have been due almost entirely to the careful observers who have frequently opened the abdomen during the past decade. It is within the recollection of most of us, when by this means the pus tube displaced almost entirely pelvic inflammation. These observers have noted the causes and various sources of infections of the peritoneal cavity, the biliary system, and hepatic abscesses with their train of symptoms, simulating malaria and typhoid fever; the gastric and duodenal ulcers producing the various kinds of stomach symptoms, known as indigestion, dyspepsia or gastritis, etc., the latter two being among the more recent achievements, and particularly rich in the abundance of well-grounded facts.

After the pathology was established in the living subject, a closer study was made of the symptoms in the early stages of disease, and this is where the real benefit is derived, for it enables us to bring the progress of invasion under control before too much destruction has taken place to permit us to

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bring about a cure. These are problems that must be solved and mastered by the practitioner of to-day. They are often rendered difficult, first because the symptoms are many times reflex in manifestation; second, because the symptoms of different diseased organs is often very similar; third, on account of the close proximity of many of the vital organs, it is almost impossible and at times totally so, to differentiate between two or more possible diseases.

The first must receive our careful study, because of the frequency of the reflex action on the stomach, when some neighboring or distant organ is affected. While we are taught by Lenander that the peritoneum of the viscera is painless when subjected to irritation, yet we remember the classical symptoms of hiccough, nausea and vomiting, when the bowel was pinched in strangulated hernia, forcibly illustrating the reflex power, so that a most careful analysis must be made in every way available, when an obscure condition presents itself. Often a diagnosis must be made by exclusion and even at times an exploratory laparotomy must be resorted to in order to clear up the situation, and, as Monahan well says, a man doing much abdominal work must, at times, open a healthy abdomen by mistake. And who among us would not rather be guilty of this, a perfectly harmless procedure, rather than live under our former knowledge of these diseases, and the consequent methods of practice.

On account of the frequency and prominence of the symptoms of gastric disturbances, when of reflex origin, mistakes in diagnosis are more common than we would wish, and will often require the most careful deductions to clear them up. As we smouldered in cerebral contentment with pelvic cellulitis until the pyosalpinx invaded the peritoneum followed by death, or a prolonged suppurative state or ruined health for life; as we procrastinated with the diseased appendix until a similar course took place, and as we continued to thwart the ravages of malaria until the gall bladder perforated, became malignant or abscesses of the liver formed, to be relieved only by perforating into the pleural cavity, or some kind of an outcome—probably death, so now to my mind, the dark spot remaining is the *status gastrica* in diseases of the abdomen, for while it may be receiving our most careful nursing, it may be only a manifestation of disease in some distant part.

We are all familiar with the gastric disturbances in the renal and urethral colic,

acute intestinal obstruction, displacements, and other disturbances of the pelvic region. These and many other diseases of the abdomen have other prominent symptoms, or physical signs by which a diagnosis can be made, with some degree of certainty. Not so, however, with all troubles in the abdomen. Principally among these are diseases of the gall bladder, duodenum, and appendix. Many times diseases exist in these parts when no tumor or other physical sign exists, and the diagnosis must be made on the symptoms and chemical analysis or exploratory incision. Many times the patient complains of a long history of indigestion, and a most careful observation will reveal the fact that gastric disturbances, if not the only symptom, is at least the most prominent one.

In this connection a most remarkable showing is made in a tabulation of 49 cases of diseases of the gall bladder as laid down when symptoms were merely gastric disturbances.

The following case serves as a good illustration where gastric symptoms are misleading in cholelithiasis.

Mrs. H., age 52, gives a history of having suffered with, and received treatment for, indigestion for four years. Complained of sour eructations of gas, distress in epigastrium, the latter much increased after a full meal, with periodical attacks of vomiting and some pain, the latter never severe enough to require an anodyne. On inspection I found a rather well developed woman, and, with the exception of slight anemia, healthy in appearance. Physical examination revealed:—absence of tumor, relaxed abdominal wall, much adipose tissue, some tenderness in epigastrium, gastric juice—acidity slightly increased, otherwise normal. No history of blood in vomit.

The absence of the prominent symptoms of gastric ulcer, the distinctive periodicity of the attacks and the relief enjoyed in the interval led me to suspect cholelithiasis with occasional lighting up of acute cholecystitis. Operation was performed March 22, 1908. Incision through the upper right rectus. Stomach and duodenum normal; gall bladder containing about a wineglassful of soft stones and three movable stones in the common duct. These were easily crushed and milked on into the bowel and showed later in the stool; the gall bladder was cleaned and drained; recovery uneventful, and patient perfectly well at present writing.

This is only an illustration of what is an

entirely too frequent occurrence, as case after case might be cited in evidence, but it is not within the province of this paper to go into the differential diagnosis of diseases of the abdomen, but simply to bring before you for your consideration what to my mind is one of the most frequent causes of mistakes in diagnosis of diseases of the abdomen, namely: gastric symptoms in a healthy stomach caused by irritation in some other part of the abdomen.

Graham says: "There will always remain a certain proportion of cases that will mislead the careful physician. These gall stone cases, where the stomach symptoms of gas distress—sour eructations, belching and dilatation predominate, and pain is little complained of (and that only of character will usually be diagnosticated ulcer), while the duodenal case whose chief symptom is the sudden, sharp, intense pain of perforative peritonitis, and where with no obstruction or hyperacidity the other stomach symptoms are in abeyance, will fall to cholelithiasis; such error in diagnosis does not militate against the clinician, as both conditions are purely surgical and the differentiation in most cases must be made on the operating table."

It is a well established fact that one of the first things nature tries to do when anything goes wrong with the alimentary tract, pulse food and cause the contents of the stomach to be vomited, so that all energy may be devoted to the care of the afflicted parts and also to prevent auto-intoxication. So we see the soundness of the Ochsner practice in acute appendicitis—to keep all food from the patient and wash the stomach. We find the symptoms most marked in acute inflammation or acute obstruction, and more particularly to the lower part of the foregut, and all of the midgut as laid down by the Mayos.

We have all observed severe inflammatory diseases of the rectum and stomach, with less gastric disturbances than when the other parts of the alimentary tract were involved. The severe symptoms in acute stages (inflammatory or obstructive) may give trouble for a short time as to diagnosis, but a few hours will generally clear up the situation. Not so, however, in the more or less chronic forms. In these the local manifestations are too obscure or indefinite to tell us positively where the disease is; yet the gastric symptoms of more or less severity continue, and are the ones most often consulted about, and this is the

class of cases to which we as practitioners must give more care than we have in the past. Far too often, a prolonged course of treatment is carried out with only one comfort in sight for the patient—his privilege of trying some other doctor.

While in the early stages of the disease a diagnosis might be arrived at by analysis of the gastric contents; in the latter stages this opportunity is gone, because even in the biliary or duodenal regions the diagnosis may not only be most puzzling, on account of the close proximity of the parts, but also after prolonged suffering, the stomach becomes secondarily involved on account of the retention of food, due to spasm of the pylorus. The decomposed food may give all the symptoms of gastric infection, and possibly even ulcer of the stomach.

Cruveilhier, half a century ago, first called attention to the spasmodic contractions of the stomach wall, palpable in the early stage of cancer, before a tumor could be felt, and visible in the later stages. Later Boas directed attention to the spasmodic rigidity of the intestines and stomach in certain diseased conditions of these parts. Close observation, however, in recent years, developed the fact that the spasmodic contraction of the pylorus is a very frequent occurrence. When present it can be seen when exposed as a distinct spasmodic contraction of the muscles of the pylorus. It is clearly a reflex sign of some irritation within the abdomen, and is intended to prevent the downward course of food and liquids, to allow a more perfect rest to the parts, and give nature a better opportunity for repair.

Its clinical manifestations are clearly gastric. Sudden and severe irritations may be sufficient to cause the entire contents to be expelled, whereas in the milder cases there is simply stasis of food with the ordinary symptoms of indigestion. Should the irritation continue, and no tumor or signs be available to aid in the diagnosis, the gastric symptoms may be the only ones present to command our attention. When the stomach is empty there may be comparative ease, but when food enters it is detained in the stomach sufficiently long to cause the sour eructations, gas, with distress in the epigastrium, and the train of symptoms too familiar to us all.

Treatment of the stomach symptoms may give relief, but they will continue to return. After a careful physical and chemical examination of the stomach, if relief



is not obtained, exploratory laparotomy is clearly indicated. A good illustration of this is found in the case of Miss L., age 28, for past two years suffered from periodical attacks of supposed indigestion, distress after eating, sour eructations of food, gas. Present attack began about four weeks ago with all the above symptoms increased in severity so that the patient was unable to retain food, lost flesh and strength and was unable to work. Analysis of the stomach contents showed hyperacidity, increased HCl and combined acid. Medical treatment and dieting having given no relief, an exploratory laparotomy was performed.

I would say that there were at times, indefinite scattering pains in the abdomen, but on careful examination, no tenderness could be elicited, except a little over the McBurney point. When patient was opened we found the appendix containing hard concretions, curled backward under cæcum, and bound down with adhesions. On palpation the other abdominal organs were found to be normal. Patient made a prompt recovery, has gained in weight and is entirely free from all her former symptoms.

Mrs. Z., age 34, operated on September, 1906, found fibroid uterus. For some time before and after the operation the patient complained of burning sensation, and symptoms of indigestion; stomach contents normal, no relief from treatment. March, 1907, abdomen opened, midway between the ensiform and umbilicus. Stomach and duodenum found to be normal; gall bladder somewhat thicker than normal but easily emptied, showing the ducts to be patulous; fundus bound down with adhesions, apparently the results of attacks of cholecystitis. Gall bladder and ducts carefully palpated for stones, and as none were found and the inflammation had entirely subsided, the adhesions were carefully broken up, the abdomen closed, good recovery made and the patient is completely well at the present time.

Mrs. B., age 32, complaining for a number of years with indefinite scattering pains all over the abdomen, slight tenderness on pressure over the gastric appendiceal and ovarian regions, but nothing marked. Complained very much of symptoms of indigestion, distress after eating, sour eructations, etc. Had been examined by a number of physicians, both in this country and abroad. Some advised operation, others advised against. It is true,

there was no tumor, or other physical sign to indicate an operation. Therefore, an exploratory laparotomy was performed, February, 1908.

The patient had evidently gone through some attacks of appendicitis, for the appendix was completely enveloped in dense adhesions so that the scissors had to be used to free the appendix. Patient also had a small cyst of the right ovary; complete recovery followed and the patient has remained well and entirely free from symptoms of indigestion since the operation. The only symptoms this patient gave any evidence of were gastric, yet the stomach and duodenum on examination were found to be perfectly normal, but there was sufficient trouble in the appendix to give much suffering.

I only give you the above few cases as an illustration of that class of patients who come to the doctor complaining of stomach trouble, where examination disclosed no disease of the stomach and little to guide one in the treatment. Given a case of this class, the first thing to do is to make a careful examination of the stomach and contents, and having eliminated other diseases in the abdomen, to treat the stomach, symptomatically for a sufficient time to find if such treatment will give relief. If not, and the patient continues to suffer, an exploratory laparotomy is not only justifiable, but demanded, and the whole abdomen should be explored to find any lesion sufficient to cause the suffering.

It is true there is a class of neurotics who will give a good picture of all the gastric symptoms due to some abdominal irritations, yet there is no way to clear them up except by exploratory incision, and I have read with much interest an article by Dr. Wilby Meyer in which he shows that he has effected a cure in this class of cases by means of laparotomy.

I would like to report in this connection a case in which I was asked to assist at an operation for obstruction of the pylorus. This diagnosis was handed to the surgeon by one of the best diagnosticians on internal medicine in this country. When the abdomen was opened the stomach was examined carefully, and, with the exception of evidences of possibly slight dilatation, no disease existed. The finger could be passed with ease through the pylorus. The rest of the abdomen palpated carefully. No other trouble could be found. The abdomen was properly closed up.

## DISCUSSION.

**Dr. Frank D. Gray, Jersey City,** offered an apology for attempting to discuss a paper that he had only just casually run through, especially one on a subject of so much importance as that dealt with by Dr. Reilly. There were just a few thoughts, however, along the lines laid down in the paper to which he wished to call attention. The most interesting of these was the rationale of the whole subject of reflex pain. Why, he asked, does a deformed or diseased appendix, particularly a chronic one, give rise to gastric pain or other gastric symptoms, and why does a gall-stone condition with adhesions about the biliary system cause gastric symptoms, including pain? He had sometimes thought that perhaps the sympathetic system is more responsible for the symptom complex than is anything else. The sympathetic system is the great controller of the circulation, and the gastric processes are very greatly, if not entirely, under the control of the circulation. Consequently, Dr. Gray thought that the irritation of a diseased appendix, a diseased gall-bladder, or adhesions about the gall-bladder or duodenum, through the control of disturbances of circulation in the sufferer, might be able to produce the gastric disturbance.

Dr. Reilly had remarked in his paper that exploratory incision is danger-free; but Dr. Gray thought that the tendency that has been manifested of late to find out the conditions existing in the abdomen by looking at them from the inside, should be restrained. This procedure should be a last resort, and should not be undertaken lightly; for it is not danger-free. He believed that in the minds of the majority of surgeons it is not considered danger-free. He had known of cases in which the abdomen had been opened without further operative procedure and without fault in the technique, and yet in which the patients had developed black vomit and died.

He thought, however, that the value of exploratory incisions must be recognized. When a patient gives a history of having had, for a considerable period of time, covering perhaps a year or more, gastric disturbances that have been treated by all practical or available internal methods of treatment without success, one is warranted in opening the abdomen and making an inspection of the stomach. Dr. Gray said that when it comes to the matter of re-opening the abdomen for the purpose of relieving pain believed to be due to adhesions, he thought that new ones were likely to be produced or the old ones to return, just as the adhesions had been formed in the first place.

**Dr. Emery Marvel, Atlantic City,** said that gastric reflexes are manifested in pain, nausea, and digestive disturbances. Probably in no other place in the body are so many reflexes manifested as in the stomach. Clinical observation shows that a great many symptoms are manifested in the plexuses of nerves that supply the organs covered by the epigastrium. The mid-gut is supplied by the plexus of Auerbach, which also supplies and controls the muscle-wall of the gastro-intestinal tract. In two places, the pylorus and the ileocecal valve, the muscle re-duplication is stronger than at other points. The former being the stronger of the two, any irritation is likely to manifest itself with greater emphasis. Whether the stimulus comes from the

appendix or from a gall-bladder containing a stone or from any other irritation, the greatest manifestation will be in the pylorus. Dr. Marvel said that the paper read by Dr. Reilly was particularly valuable, and should lead to a more careful observation of this group of symptoms and to localizing their causes.

## TETANUS.\*

## Its Prevention and Treatment.

*By J. Harris Underwood, M. D.,  
Woodbury, N. J.*

Much has been said and written on this subject, but since the average statistics show a mortality of eighty per cent. with thousands of cases occurring each year, all information having any bearing on its prevention or cure is valuable. The prevalence of a condition, especially at this season of the year, which jeopardizes the life of all its victims, is my only apology for offering this subject for your consideration.

Tetanus, as we well know, is a microbic disease invariably preceded by some solution in continuity of structure, either apparent or concealed, and characterized by painful tonic and clonic spasms of the voluntary muscles, beginning with the jaw, and showing marked exacerbations. By some it is claimed to occur at times as an idiopathic affection. These cases are either not tetanus at all or traces of a pre-existing injury.

Tetanus being due to a bacillus which is anaerobic in character, (that is, one growing best without oxygen) explains the comparative frequency with which punctured wounds are attacked. In punctured wounds the bacilli are deeply placed in a cavity where air cannot enter, making a favorable place for the development of the bacilli and their toxins. Nancrede points out that supuration favors the growth of tetanus bacilli, for the pyogenic organisms consume oxygen, thus making an anaerobic culture medium.

The symptoms may occur a few hours after an accident, or may not arise until several weeks have elapsed. Gowers speaks of a case in which the patient was dead within fifteen minutes of the accident. The wound being on a finger and made by a broken porcelain utensil.

Although tetanus has been a well recognized disease for centuries, Hippocrates having accurately described the clinical picture,

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a clearer conception of the condition arose in the sixteenth century through the teachings of Ambrose Paré, when surgery assumed a more important position and tetanus became a frequent complication. It was not until 1880, however, when Sternberg announced that he could produce experimental tetanus in animals by injecting gutter water that any light was thrown on its etiology.

The bacillus of tetanus was first observed by Nicolaier; he also discovered that the bacillus was found only in the wound or its immediate neighborhood. Gumprecht first showed that the toxins attacked the spinal cord and not the peripheral nerves, and that the clinical phenomena were the result of the action of the toxins on the cord alone.

Up to 1904 the organism had been isolated. It was known that the disease was produced by the action of the toxins generated in the wound, upon the spinal cord and the toxins had been found in the spinal cord and peripheral nerves, but the path traveled by the toxins to reach the cord was a matter of obscurity though it was generally supposed that they traveled through the blood and lymph circulation.

Probably the most important recent contribution to our knowledge of tetanus and its development, was that made by Meyer and Ransom, who proved that the toxins were carried to the spinal cord not by the lymphatic circulation but by the nerves, and further, that they are carried only by the motor and never by the sensory nerves and not by the lymph channels in the nerve but in the protoplasm of the neurone. This recently discovered fact, however, does not preclude the possibility of the development of tetanus after the division of the nerves above the point of inoculation.

Some of the toxin diffuses itself through the tissues till it comes in contact with the terminal filament of a motor nerve through the medium of which it is transmitted to the motor ganglia of the cord. Some is taken up by the lymphatics, and enters the circulation and in this way comes in contact with the motor nerve endings. The specific action of the toxins is the production of a condition of hyper-excitability of the motor ganglia. This causes the tonic contraction. The clonic contractions are the result of reflex excitability.

The bacillus in itself is a slender micro-organism with its spore attached at one end, making it appear like a drum stick. It is motile and is anærobic. It grows in the upper layers of the soil, manure, hay and

on rusty dirty implements. This statement seems contradictory, as it has been said that the bacillus does not grow in the presence of oxygen. Bacteriologists explain this by the fact that infections with tetanus are almost invariably mixed ones, and the other micro-organism which accompanies it absorbs the oxygen, thus making the soil suitable for its growth. The poisons generated by the bacilli in a wound are found to be toxalbumins and the most deadly known substances. It has been found that three-one-hundredths of a grain is sufficient to kill a man of 175 pounds, while it requires a half grain of strychnine.

It is hardly necessary to dwell on the symptoms of tetanus, for when once witnessed it is never forgotten. The incubation period averages about seven days. The first symptom in man is stiffness of the muscles at the back of the neck, sometimes preceded by a chill. In a few hours trismus sets in after the masseter, the other muscles of the face and jaw and muscles of deglutition become affected, difficulty is experienced in swallowing even the mucus in the throat. The brow is wrinkled, the corners of the mouth are drawn upward, giving the patient the peculiar expression known as the risus sardonius.

Next the muscles of the trunk are involved, then those of the back and finally the muscles of the extremities, especially the lower extremities. There are the tonic and clonic muscular contractions, the former causing constant rigidity, while the latter are paroxysmal. The clonic contractions may be brought on by the slightest irritation, as even a draft blowing on the patient. They occur at intervals of from a few minutes to a few hours.

Owing to the rigidity of the muscles of the neck and back the patient during a severe convulsion assumes the position of opisthotonos, only the head and heels touching the bed. The distress is added to, because the patient's mind is clear to the end and to further add to the suffering sleep is seldom possible. The temperature is variable, usually elevated during the paroxysm, and just before death rises, sometimes as high as 110 degrees Fahrenheit. The pulse becomes rapid as the disease progresses and finally the patient dies either of exhaustion or asphyxiation. All through this group of terrible symptoms the patient lies absolutely fearless, never thinking himself in the grip of a fatal disease.

In 1890 it was proven conclusively that animals under protection of an antitoxin

could secure immunity from tetanus. By experiment it was proven that there was present in the blood of artificially immunized animals an enzyme which when mixed with virulent cultures of tetanus bacilli destroyed its poisonous qualities. It is still a matter of discussion as to the precise manner in which antitoxin does good; some regarding the action as a purely chemical one in which the antitoxin actually neutralizes the toxin; others that the toxin and antitoxin only act on one another through the medium of the living body, and still others explain the action by Ehrlich's side-chain theory. Suffice it to say that antitoxin is invaluable as a prophylactic measure, and while not quite so reliable as a curative measure has beyond doubt saved many lives which under older methods would have perished.

To successfully combat tetanus we must begin with the injury. Knowing the great virulence of the toxins, the rapidity with which they act, that the bacillus remains at the site of the injury and manufactures its toxins there, distributing them through different channels to all parts of the body, especially selecting the motor nerve trunks, we have a tangible array of facts which should lead us toward proper care of the case, at least theoretically if not practically.

Paramount in the treatment is prophylaxis. Any suspicious wound (by suspicious wounds, I mean those which have by any chance come in contact with soil, rusty instruments, manure or the like and especially punctured wounds) should be opened up immediately and thoroughly curetted and an antiseptic applied to destroy the bacilli and their spores if any remain.

From bacteriological tests the most reliable germicide in tetanus seems to be a solution mercury bichloride, 1 to 1000 with one-half per cent. hydrochloric acid added or a strong solution of iodine which has the advantage of extreme penetration. Continuous bathing with one and one-half per cent. carbolic acid solution is useful but pure carbolic acid should never be used, as it coagulates the albumin of the tissues, thus sealing up any bacilli that may be present and forming just what we do not want, namely an anærobic field. The result of treatment is directly proportionate to the lapse of time between the first implantation of the germ and the institution of treatment.

Fully as important as the thorough disinfection of the wound is the administration of antitoxin, for there is no better ex-

ample of the frequently quoted axiom, "an ounce of prevention is worth a pound of cure." All patients with suspicious wounds should at once receive an injection of 10 cc. of antitetanic serum. McFarland has shown experimentally that antitoxin in the form of dry powder sprinkled over an abraded surface in animals, then rubbed with pure cultures of tetanus is preventive in almost every case.

An investigation was recently made by the "Journal of the American Medical Association" in which not a single case was found where antitoxin had been used that subsequently developed tetanus.

In treatment of the disease we must direct our efforts in three ways:

First. Controlling spasm;

Second. Overcoming the toxins;

Third. Supporting patient till symptoms subside.

Sedatives have been employed for decades in the effort to control the spasm, with varied success. Of these chloral and the bromides are most reliable, while probably curara is third in importance. Chloroform is also used for anæsthesia with good effect. I have seen better results from chloral internally than any other sedative, while chloroform gives temporary relief from the spasm and is a slight comfort to the sufferer in his last hours. Many special treatments have been used to combat the toxins, by far the most important of which is the serum treatment. This treatment is based on the fact that the blood serum of animals artificially immunized to tetanus, contains a body which when mixed with a virulent culture of tetanus destroys the virulence of the culture for susceptible animals. Facts to prove the efficiency of this treatment are fast being brought out. For several years previous to the serum treatment, the mortality in Cooper Hospital was 100%, but since its use the mortality is vastly less. In 1906 eleven cases were treated in this institution, six of which recovered. Four of the remainder were hopeless when admitted and died within a few hours. From observation I am convinced that in the serum treatment good results are almost invariably obtained if the dose is large and frequently repeated. During 1906 a colored man was admitted to the wards of Cooper Hospital with fully developed symptoms of tetanus and a history of having punctured his foot with a wire nail one week previous. The patient was rigid when admitted. He had severe convulsions every few minutes, the jaws were



locked and opisthotonos was marked. He was given 10cc. of antitetanic serum every two hours with ten grains of chloral and the same of bromide of soda. The serum was given for two weeks day and night every two hours and for several days thereafter at intervals of four hours, then four times daily until the twenty-third day, when all treatment was stopped. He received in all about 200 injections or about two quarts of serum with no ill effects. He was discharged cured.

Later the same year a man 35 years old was admitted with a history of having had his finger crushed while working on a building one week previous. His finger had been dressed by a physician and subsequently by his family, during the week he had worked in the rain and thought he had taken cold, his muscles being sore and stiff, but the day previous to admission he began having tetanic spasms which became more and more frequent. On admission the symptoms were typical of advanced tetanus-trismus, rigidity, opisthotones, and frequent convulsions being present. He was given the same treatment as the previous case, but responded earlier and after five days the dose was given every four hours for the following ten days and subsequently three or four times a day until 140 injections were given. He was discharged cured.

These two cases were undoubtedly acute tetanus and severe, but yielded to treatment and without the slightest ill effect. In the eleven cases treated during 1906 the only bad effect noted from the use of serum was in one case,—a woman who had received 70 injections and developed an annoying urticaria which soon subsided.

During the Civil War the mortality from tetanus was 90%, no serum being in use at that time. Packard and Meson have gathered together 1,216 cases in which serum was used and the mortality was 42%. Moschowitz found a mortality of 40% in 460 unselected cases treated with antitoxin, among which were many advanced cases.

In the absence of serum the carbolic acid treatment of Bacelli seems to be next best but has not proven very satisfactory in this country. In Italy flattering reports have been given. It consists in subcutaneous injections of 1% solution of carbolic acid about the area of infection in such quantities and intervals that the patient receives 80 grains in 24 hours. It is claimed in dilute solutions carbolic acid does not co-

agulate albumin and that the results are gratifying.

In deciding the virtues of any mode of treatment we must draw conclusions from results and in this disease the mortality list is the convincing argument. With a mortality of 80% without antitoxin and 40% since its use the conclusion is obvious.

## DISCUSSION.

**Dr. George E. Reading, Woodbury,** said that the importance of this subject is great to those that have had any experience with it. The disease is particularly liable to follow explosion wounds. Consequently, one reads in the newspapers, after every Fourth of July, a tale of death and disaster from tetanus caused by explosions, particularly from the deadly toy pistol. The value of the serum treatment for this disease is best shown by the statistics of the St. Louis Hospital. Previous to 1907, serum injections were not used until the symptoms of the disease had developed. Every Fourth of July they had a great many cases that were followed by death. In that year, they began to inject 10 cm. of antitetanic serum into every explosion case that came into the hospital; and that year no case of tetanus developed, and there were no deaths. This is, of course, only negative evidence; but negative evidence as comprehensive as this acquires a great deal of strength. The trouble with treatment instituted after symptoms of tetanus have developed is twofold: the difficulty in getting the serum and the cost. The amount required after the development of symptoms is so excessive—so much more being required than for any other disease for which there is a serum—that it is impossible to use this treatment except in hospital practice or in the cases of quite wealthy patients. The poor are the ones that usually get these wounds; therefore, it would be much better if all hospitals would adopt the St. Louis plan of giving a preventive injection in all cases that may be open to suspicion. We all know the class of wounds in which tetanus is likely to develop.

When serum treatment has not been available, Dr. Reading has seen good results from carbolic acid treatment. He has seen only one case in which this was used, but that patient got well. This made one hundred per cent. of cure, which, he said, is as good as one can get. Statistics are, however, misleading. Some one, said Dr. Reading, has remarked that lies are divided into three classes: Lies, lies and statistics. His one case of cure with that treatment would come under the head of statistics in this classification. At the same time, he said, the treatment is worth trying when, for any reason, one cannot use the anti-tetanic serum. It is better than simply letting the patient die with the expectant treatment. The statistics from the use of the carbolic acid treatment abroad are good; and if it were more generally tried in this country, they might be good here. He thought, however, that preventive injections of serum should be used in all cases in which their use is possible.

He had also thought of the thorough washing out of all suspected wounds with peroxide of hydrogen. He had had a number of suspicious wounds treated in that way, and none were fol-

lowed by tetanus. He can do no harm, for one is working on the philosophical assumption that in introducing acid oxygen into the wound, one is destroying a bacillus that will not grow in oxygen in the form of atmospheric air. The evidence given by him, while merely negative, he considered good as far as it goes; and he thought the treatment worth trying.

**Dr. J. H. Bradshaw, Orange**, thought it unfortunate that in the treatment of tetanus after the symptoms have developed the remedies given are almost as dangerous as the disease. The huge doses of morphine, chloral, and other drugs administered in cases of tetanus would kill a person in good health, and Dr. Bradshaw had no doubt that tetanus patients are often killed as much by the remedies as by the disease. One of the remedies suggested, he had used also with one hundred per cent. of cures, but it should also be stated—in only one case. This remedy was tartar emetic, which can be given in these cases with comparative safety.

**Dr. J. L. Wrightson, of Newark**, said that the use of the serum certainly does cure some cases. In one case treated at the City Hospital of Newark, he had no doubt that the outcome without this treatment would have been fatal. The cost of the serum used in this one case was three hundred and seventy-five dollars.

### CORRECTION.

Dr. English's Discussion of Dr. Stern's Paper.

We regret that in the Abstract of the Papers and discussions in our September issue that the remarks of Dr. D. E. English, of Millburn, were incorrectly given on page 209, in discussing Dr. Stern's paper on "Diagnostic Importance of Vomiting in Childhood." The Abstract was prepared by one who is usually very accurate. Dr. English is correctly reported, on page 99 of our August issue, in this discussion, following Dr. Stern's paper.—Editor.

Dr. English writes us as follows:

"The printed discussion reads as if the 500 cases of scarlet fever occurred in my own practice. I tried to make it plain that the figures were from a paper by Dr. C. I. Kerley, which he read in Chicago, before the Section on Pediatrics at the A. M. A. annual meeting. I said, however, that my own experience corroborated his figures. 'He had been giving this drug (calomel) in combination with sodium, with better results than when calomel was used alone.' What I said was just the opposite. At the suggestion of Dr. Coit, I have for the past two years been giving the calomel alone in one full dose at bedtime, with better results than formerly, when my habit was to give it in divided doses combined with sodium bicarbonate. I also tried to make it plain that it was more important to keep boric acid out of the baby's mouth than out of the nursery."

Pain in the ear, increased on traction of the auricle, with slight diminution, if any, of hearing, suggests a furuncle in the meatus. Introduce the speculum with great care. The probe will often reveal a point of marked tenderness.—*Amer. Jour. of Surgery.*

## ANNUAL BANQUET OF THE MEDICAL SOCIETY OF NEW JERSEY.

At Hotel Cape May, June 19, 1908

The banquet was held in the spacious dining rooms of the Cape May Hotel. About three hundred and fifty members of the State Society were present with their guests, including the ladies—the latter nearly equalling in number the physicians. Dr. E. J. Ill, the president of the society, acted as toastmaster, and presented a "Medical History of New Jersey."

Dr. Ill then introduced Dr. Stephen Pierson, of Morristown, who replied as follows to the toast of

### "THE GENERAL PRACTITIONER"

Mr. President, Ladies and Gentlemen:—Only for the deep sense of obligation which I feel I am under to Dr. Ill for many personal favors done me and for many good works wrought upon my patients, I do not think I should be here to-night. It really requires a great lot of physical and moral courage to face this crowd of cruel vivisectionists (I think they called you that at Trenton last winter) whom I see watching and waiting for me on every side. I am not accustomed to speak to an audience like this, and it comes a little hard. I am beginning to perspire already. Before I am through I think I shall be perspiring as freely as on that occasion when I was attending my first case. Perhaps you remember your first case, Dr. Ill. You have been long enough in practice to afford to do so. I did perspire on that occasion. I am sure I was standing ankle-deep in water. I have sometimes spoken before the Washington Association, but there it was always after the famous Washington punch, when anything goes, just as anything goes on a Merry Widow hat, if the widow be young and pretty. I have also sometimes spoken before my comrades of the Grand Army, and the more blood and gore the story has in it the better they like it. The old soldier likes to tell a big story himself, and imagines it is pleasant.

The audience before me now is of a different sort. I am not accustomed to speak to a body of selected and warranted scientists, such as I see in front of me—professors of one of the exact sciences (I wish that I could say you were practitioners of it); gentlemen who never have to face probabilities, whose conversation is "Vea,



yea," and "Nay, nay," who express their conclusions in terms of mathematical accuracy and precision; who solve all the problems before them with mathematical exactness except the one of calculus—where the good boy has the advantage of you; for, by the aid of the pony, he sometimes finds a solvent for calculus; and I do not know of any regular practitioner who has ever found this.

Now we all admire and respect our President, Dr. Ill. If we did not all admire and respect him, not even Essex County politics backed up by Hudson could have lifted him into the chair. One of his good friends—a patient she was, came to see me one day and said: "The only thing bad about Dr. Ill is his name;" but that is not really so. It only happens that some letters, illspelt, make it sound so. It was a good name when it came to him through his father; and when it passes to his children and his grandchildren, it, because of its passage through him, will be a still better name.

Much as you think of Dr. Ill, however, I do not think you often think of him as a church-member; but he is, and a very devout member of the sect to which he belongs. I should not know just how to name this sect theologically. Perhaps Dr. Ill can tell me. I will describe the belief and practices of the sect:

Dr. Ill belongs to the sect that believes and practices the laying on of hands; and when a member of that sect once lays his hands upon an abdomen, there is no need of an X-ray picture; for he will tell you what is wrong inside in terms as shadowy as anything the X-ray machine can do. It may be a dermoid, it may be a fibroid, it may be a twisted pedicle, it may be a sarcoma, it may even be an appendix. He merely remarks: "Let's open her up. What do you say? Hey?" and they open her up, and then they find—perhaps they find all these things; perhaps they find only one of them; and perhaps (and I have seen this happen, not to Dr. Ill, but to some other prominent members of the sect), perhaps they do not find any of these things at all; but, instead, alack and alas! they do find something else. And what shall we call it? A neoplasm? Yes, neoplasm is a good name; but perhaps neophyte would be more descriptive still. And then it is that we are covered with shame and confusion; because, if we had only waited a little longer, the whole trouble might have been explained to the satisfaction or otherwise of all concerned but the little neophyte himself, or herself.

Now what shall I say about the General Practitioner, when there is so much to be said about him and so little time in which to say it? Perhaps it is best to say nothing at all; because by my saying little, you might infer that that was all there was to be said—which is not true. This is the age of specialism in manufacture and in medicine. Specialism in manufacture has benefited the factory and the consumer. Specialism in medicine has benefited the doctor and his patient. Still, from the number of cards that we general practitioners get through the mails, from the number of specialists turned out annually, and from the positiveness with which our patients tell us that they want to see a specialist, it would really seem as if the general practitioner were passing—in fact, that he had almost passed; and that you, Mr. President, would soon have to respond to the toast instead of me.

But really, this sphere (?) of ours is not yet dead—not quite ready for burial, anyway. I do not think that our patients are ready to be organized on a department store basis, with an aisle manager to direct the patients where to go for the specialist just suited to his case. For instance, like this: "Eyes, did you say, madam? Top floor, just under the roof. Liver, did you say? In the rotunda, to the right. Hearts, miss; First or second hand? First, at the—second, at the remnant counter on every floor."

Now, Mr. President, I do not think we are ready for this; at least, we have not reached it yet. The general public still looks to the general practitioner for protection and safety; and to the general practitioner also come the specialists with their prayer, "Give us this day our daily bread." Really, however, there is no rivalry between the general practitioner and the specialist. We wear the same uniform and are enlisted in the same cause—the betterment of our common humanity. In these days, so many fountains of knowledge are open to us and are pouring their floods of wisdom down on us that it is impossible for any man to follow to their source any one of these paths. The general practitioner needs to know what he knows; and, second—and even more important, he needs to know when he does not know. Then, if he is honest, he seeks the aid of some man who ought to know by reason of special study. We need each other. We need the specialist, and he needs us. Perhaps for a time we could get along without the eye-man and what he stands for; we could grope along

in blindness for a while. We could get along without the ear-man, and what he stands for; we should thus miss hearing many unpleasant things that are said about us—some of them true. We might even get along without the throat man, and should not then be bored with after-dinner speeches. But I cannot see concerning the obstetrician, how we are to dispense with what he stands for, and remain true to Roosevelt and Ill; and, for that matter, if we could, Old Man M—— would be out-done, the world would be entirely disrupted, and Charles Dickens's ghost would have the opportunity to watch a new evolution from molecule to man.

But the practice of medicine and surgery is not all pills and potions and tongues, or even appendices. There is in it, at times, that which is inspiring, and even heroic. A few weeks ago, I was visiting my old battle-fields. It was just forty-four years since the Battle of Chickamauga was fought, and I visited that battlefield. I was not, however, in that battle; nor was my regiment. The guard, who was driving us around, told us that this was the bloodiest field in the history of the war; and I can understand how it might have been so. This battlefield is now owned by the government, and the position of every battery and regiment is plainly marked. Where that day a battery was in action, now stand two cannon; and where there was infantry, the position is marked by long rows of markers. On one side of the battlefield stood two cannon. On the east side stood two more, and at the south-east corner, two. Back of each were rows of markers. On each side of this were two more cannon, showing a Northern battery; and on the west side were two more cannon, showing another Northern battery in action. The battle was in progress all the afternoon, and time and again the troops charged back and forth. When the line advanced, it met the artillery and infantry in front; but as it got to the centre, it caught the terrible cross-fire from the right and left flanks. Without much imagination, you can see the red soil taking on a deeper and deeper hue of red or crimson, as it drank in the blood, first of the blue, and then of the gray. Down in the corners of the field, the State of Georgia has erected a beautiful monument. On its face is this inscription: "To those of her sons who fought here this monument is erected."

It is not necessary, however, to fight or to be killed, in order to be called heroes, as these men were. The essence of their her-

oism was in the sentiment of those who gave much and those who gave all. It was not because they fought and were killed, but because they gave much or all for something other than themselves—for their country, as their country appeared to them.

A few days afterward we stood in Arlington National Cemetery in Virginia, at the grave of my old Colonel. After we had placed some flowers on it and were turning away, the Superintendent of the Cemetery pointed to a grave not far away, and said: "There lies the body of a man over whom should be erected as tall a monument as the tallest in this cemetery." He told me whose it was. It was the grave of a doctor—the doctor who, down in Cuba during the American occupation, when yellow fever was ravaging our army, in order to prove the correctness of the opinion that the mosquito was the only real transmitter of yellow fever from man to man, permitted himself to be bitten by mosquitoes that had previously sucked the blood of a man dying of that disease. He took it and died. Why did he do this? To prove the correctness of a hypothesis? No; that would have been criminal foolhardiness. He did it because he felt that if he could prove the correctness of his view, it would be possible to save the lives of thousands upon thousands of people, and to take from a fair land the blot that was cursing it. That was why he did it, and that was why he died.

Now, Mr. President, I have heard the shriek of the shell and seen the gaps left in the ranks, as it tore through; and I have heard the busy song of the minnie-bullet and the sickening thud as it stopped in the body of men near me. I have felt the hurt of a bullet myself, too; but it would have been far easier to have faced these things over again with the crowd than to have sat by Dr. Larzalere, listening to the hum of that little insect as, sharpening its tiny sword, it hovered over the arm bared to receive the fatal blow. To me, that was heroism most sublime; and, speaking with the utmost reverence, it seems to me that it was heroism Christ-like in sublimity. So he died; but in his death, he gave life to thousands upon thousands. Yes, Mr. President, the tallest monument in Arlington Cemetery should be over that grave.

Now it may not be given to us and to some other members of our profession to rise above the ranks, to be honored with bronze tablets or monuments; but to many does come, and is embraced, the opportunity for heroism, not so important as that of



which I have told you; but one just as great and true and noble as if known to all the world. What is in store for us? Just this—and it is for you and for every honest man: There is something better than a bronze tablet or letters of praise imprinted upon a monument. The bronze tablet will turn green and corrode; and letters of praise on a monument are, at best, things cut in a dead stone erected in the city of the dead; but for you and every honest doctor—and I am sure that this means everyone into whose face I am looking—there is something better, truer, lovelier—strong words of praise and gratitude and admiration on a living monument, glowing there in letters of light and love, increasing in strength, because they are founded upon life, and that life is the heart of our patients.

When a man has been forty years in practice—and it will be forty years next September since I began—he is sometimes inclined to pass judgment on his own life. Those of us who have reached that age, if we would see our whole lives, must look back toward the beginning; for even if by some prophetic vision we could look forward to the end, that would represent so small a fraction that it would not be worthy of consideration.

What does the general practitioner see, when he comes to pass judgment on his life? Just this, and I think I can speak for all my brethren; he sees his life fairly faithful and honest, made up of fairly faithful and honest devotion to the interests of his patients. He sees a life containing many errors, it is true (and until men become omniscient, every man's life must be full of errors); he sees a life in which there have been hurts, in which some patients have turned from him and gone elsewhere, taking away their confidence in him. These are hurts, sometimes bad; but oftener not. But though these are hurts, they need not be harms. Properly heeded, these hurts help us; because they help remove the cause that lay back of the hurt in the first place, if there was a true cause. More than that, by the wounds and self-sacrifice, they strengthen a man's character; and he is the better for it.

As to his rewards, he has made a living, and has perhaps a little left over with which to help somebody else live. That seems a poor sort of life, not marked by greatness—perhaps not even by the elements of greatness. It does not appear satisfactory to some of you young men, whose elastic ar-

teries are answering back with responsive thrill to every impulse of a heart beating and throbbing with ambition and with the expectation of great achievements. I am glad you are not satisfied with it. You ought not to be, because it is only through dissatisfaction with present conditions that new methods and anything that is better for the future come. So keep your aim high, young men. The arrow may not reach the sky, but it will go the farther toward it because your aim is high.

And now, when that day shall come which must come to every man, how shall the doctor sum up himself for himself? Well, for me, I think it will be something this way: If, in addition to those things of which I have spoken, it shall be given me to know, when that day is approaching, that upon the hearts of some of the many to whom I have ministered it is written, 'He gave to me much,' and if upon the hearts of a few, if only a few, it shall be written, 'He gave to me all'—then will my ambition as a medical man be satisfied—then shall I lie down to sleep saying, "I am content."

Dr. Ill said that when the cases in regard to experimental medicine had their hearing before the legislature of New Jersey, no speaker had received more applause for his remarks than Professor Hobart A. Hare, of Philadelphia, whose qualities as a teacher are so well known that they need no commendation. Because of these qualities, Dr. Hare had been asked to speak on

#### "THE MEDICAL MAN AS A TEACHER."

Dr. Hare's speech was as follows:

Mr. President, Ladies and Gentlemen of the New Jersey State Medical Society: I hardly know how I should begin my remarks tonight; because I cannot help feeling that the ones just made by Dr. Pierson should, in one sense, be the concluding proceedings of the evening. They have stirred in our minds and hearts thoughts of patriotism and self-sacrifice; and they have given the younger of us the opportunity in mind and heart, if not in fact, to lay before him the gratitude that we younger men feel to those who fought for the Union at a time when some of us were just old enough to remember the boys in blue marching to the front. I cannot help feeling that any remarks that I can make, after he has spoken so well and earnestly, and has so beautifully depicted the duties and functions of a medical man, will be in a sense a sacrilege. I feel that I am in the position that Abraham Lincoln once said that he felt himself to be in the celebrated

Douglas Campaign, when, having heard a wonderfully eloquent man who had preceded him, Lincoln said that he felt that there was nothing left for him to do except what a man in his old district had done, mount the rostrum, shine his eyeglasses, open his mouth, and leave the consequences to God.

I have been asked to respond to the toast of the Teacher in Medicine. I do not think I should respond to it concerning the teacher in the medical school, but rather in the sense of what medical men who value their profession endeavor to teach their lay brethren and fellow practitioners. They endeavor to teach two things; first, how to protect themselves from being ill; and in so doing belong to the only guild that deliberately with its right hand attempts to take business from its left. We do not try, as the clergy do to keep people out of hell; we try to keep hell out of people. Perhaps it is fortunate for us that the presiding hand which governs this place of departed souls sees that we do not succeed too admirably. We teach them to be healthy and lead earnest lives; and certainly a very large proportion of the profession teach not only by word of mouth, but also by deed, what pure lives are.

It is quite impossible for the man actively engaged in commercial pursuits to have any real conception of what the medical profession is. He sees nothing before him but success, represented by the almighty dollar. The medical man, by force of circumstances, sees very small almightiness in this dollar; but, on the other hand, he sees that which has been so well depicted by Dr. Pierson, which, as life advances, looms larger and larger, until the dollar becomes infinitesimal and the good he has done becomes large, like the great shaft that we shall erect to Dr. Pierson.

When we go before the legislature and seek to induce them not to do anything that will interfere with vaccination, we are told that we are trying to do something that will put us out of business. A cold-blooded friend in Philadelphia said to me the other day: "Let them reverse the vaccination act. You and I can vaccinate our children, and let the other fools die." It is true that the state pays fifty cents or a dollar to the physician to vaccinate each person; but how much more would come to him if an epidemic of this terrible disease were to sweep over Pennsylvania or New Jersey? Yet we protect those who scoff at us.

The medical profession may be divided

into two classes:—those who are humane enough to do everything in their power to advance the health of the community, who will fight Christian science, osteopathy, and kindred quackisms, and thereby deliberately decrease their incomes; and a smaller number, who find that the more quacks are allowed to practice, the more regular physicians can get practice, and the longer they can get it.

You have all heard the story that I was reminded of to-night by the Senator on my left, of the Christian Scientist who asked the medical student what three sciences led to death. The student said he did not know; and the Christian Scientist said, "Homeopathy, osteopathy and allopathy." That is just the point I want to emphasize. It is our business to teach the public that we are not homeopaths, osteopaths, or allopaths. I should almost as lief be called either of the first two as the last. We are practitioners of medicine; and we do not care whether we are called regular practitioners or simply practitioners. We stand as a body of enlightened men, ready to use any means that appeals to reason for the relief of those under our care. We do not care whether the means comes from an old woman in a remote corner of Cape May County or from the professor of a medical college at Berlin; the regular profession of medicine, throwing aside all fads and fancies, will speedily use it for the benefit of mankind.

I trust that the medical profession does something more than this, however. Very unconsciously, it continues to impress upon the fiber and sinew of the community the fact that bravery is always present. The impression is so constant that it does not often loom up large. The doctor is expected, as a matter of course, to go into the presence of disease and death; and no more mention is made of it than if a graduate of West Point or Annapolis does it. It is only when the public stop to think that they are impressed with the fact that it is brave. Occasionally some great instance like that of Dr. Larzalere, in Havana, stands out and impresses the public mind. Occasionally we read such a tale as recently appeared in the *Lancet*, of an English doctor who was receiving a mere pittance from the government. This man heard that typhus fever was raging in an island near the coast, and wished to go to it. He could not get any one to row his boat, so he rowed across himself. He made eight trips, altogether, carrying the patients across one by one.



When the last had been landed, he fell exhausted; and later he died of typhus fever, a martyr to his duty. We hear of instances like that of the surgeon in the United States navy who, when a sailor was hurt in the harbor of Apia, went below in the sick-bay to attend him; though a violent storm was raging, and the only ship in the harbor that had enough steam up to go out in face of the cyclone was the English ship, *Calliope*. When the *Calliope* went out the sailors on the English ships in the harbor sang, "God Save the Queen"; and the band on the American flagship played "Our Country 'Tis of Thee"; but the surgeon in the sick-bay was still faithful to his duty, without any music or companions to help him.

When the Noble Six Hundred at Balacava made their famous charge, they performed an act of daring soldiery; but every day in the year an equad number of medical men, lacking the enthusiasm born of numbers, walk with braver tread into the presence of war and contagious diseases; and that, without a line from the tragic pen of the war correspondent. Some one has asked why we do it. We do it because in the breast of human beings there is a longing to aid their fellowmen; and they get a reward that no dollar can bring, the reward described by Dr. Pierson. These scoffers remind one of the lame child in the Pied Piper of Hamelin who could not follow the Pied Piper. When all the other children had followed the Pied Piper into the hole, he stopped and said: "No; one was lame, and could not walk the whole of the way." In after years this child was wont to complain: "It is dull here, since my playmates are left."

These scoffers are deprived of all the sights that we see—that something far better than the Pied Piper promised the children of Hamelin. Can we describe it? I think not. For that matter we cannot describe what religion is. We cannot describe what it is that makes one man do another a good turn. Some of you may have heard me tell the story of Giles Fisher, who, when asked what religion is, said: "Religion is not luster made of light or flowing odor mixed with spicery; yet it's a sort of inward peace, a harmony of sounds within the breast; another life complete, in which the soul may rest."

Let us hope that the members of the New Jersey State Medical Society, as teachers of medicine, not in medical schools, but to their fellow men, may have it said of them,

as Dr. Oliver Wendell Holmes said of Dr. Ware:

"A life with purer thought and aim, a voice more kind,

We may not hope on earth to find;  
And love that lingers o'er his name  
Is more than fame."

*Dr. Ill* said: There are few of the laity who have made a closer study of the politics of our profession or understood our profession better than our friend who represents Somerset County in the Senate. There are few who have assisted us so freely and so disinterestedly. He has our sincere admiration and deserves our thanks. Some day we shall be able to show it. Then the medical profession will be properly and ably represented in the State Board of Health. I present to you Senator Joseph S. Frelinghuysen, who will respond to the toast,

"THE DOCTOR AS A POLITICIAN."

*Senator Frelinghuysen* said: Mr. President, Ladies, and Gentlemen of the New Jersey State Medical Society:—It gives me great pleasure to be with you to-night; but I feel somewhat embarrassed, for two reasons; the subject that I am to talk upon, "The Doctor in Politics," embarrasses me somewhat; because I think that the doctors present here to-night know more about politics than I do, particularly after I see that they have brought their good wives with them. In the second place, we in a measure celebrate a victory in regard to a condition that is not well, and will not be well until restrictive legislation is written in the law. When Dr. Pierson spoke so feelingly about the expression of Dr. Ill when he finds the symptoms of appendicitis, I thought that Dr. Ill for once had abandoned the expression; because he did not say to me, "Let's open her up," and I can assure you that he did not perform the operation for appendicitis on a cold body.

After listening to the eloquence of the addresses of Dr. Pierson and Dr. Hare, I feel somewhat like the Irishman who got into an altercation with a colored man; and they decided that they would fight, and that the one who said "Enough" should be vanquished. They fought, and first one and then the other was on top. Finally the Irishman ground the negro's head into the dust, and he said "Enough." The Irishman exclaimed: "Sure, I've been trying to think of that word for the last ten minutes! What an elegant memory you've got."

Mr. President, I have just returned from the Republican convention in Chicago.

While there I was reminded of the unfortunate illness I had there last summer; and I take this opportunity to express to you and to your society my thanks for that telegram of encouragement which I received while lying on my bed of illness at that time. It did a great deal to encourage and revive me; for I knew that there were good friends in New Jersey that thought something of me. Speaking to-night of Cape May County, I heard you say that in the old days there were no doctors there. This reminds me of an experience of mine in Quebec several summers ago. I met an Irishman driving one of those carts that you cannot get into or get out of again. He spoke French almost as well as I did. I said: "The air is pretty fine up here." He said: "Yes, it is fine." I asked: "Are there any doctors here?" "No," he replied, "they do not need doctors." "Large families?" "Yes. Sure the Government had forty thousand acres, and offered twenty to any one who would bring a family of ten children. The land was used up in two weeks." If the powers that be would do the same in Cape May, they might get rid of some of their waste land.

I am not going to read all of this paper. It contains a few thoughts that I have written down; because in our experience at Trenton some things came up that I want to recite to-night. I think it will benefit both of us. I am not like the man who recited his speech carefully before the mirror, and then got up before the audience and said: "Though totally unprepared——" and his wife said: "John, you knew it before you left home."

The State of New Jersey has much to be proud of—her government, her wise laws, her healthful climate, her good roads, together with many other advantages. She also prides herself on the high character and intellectual standing of that noble class of citizens, the members of the medical profession—her learned doctors and skillful surgeons, who by their scientific research have advanced medicine and surgery in the State. We are met to-day, most of us, to indulge in scientific discourse, but some others like myself, come to offer our allegiance to the cause of upright practice and advanced medical learning and to discuss matters of legislation; legislation that we hope will benefit the people of the State, not only of the present but also the rising and future generations. My association at Trenton politically, in my home professionally and about the state socially, makes me

feel very much at home to-day with the doctors, but I think I have come in closer fellowship with them at Trenton where in matters of public health, pure food and medical legislation, we have worked together in order that beneficial laws might be enacted and harmful laws defeated, for the protection and safeguarding of the health of the people of the great state of New Jersey. And speaking politically, for I cannot speak professionally, being only a layman, I congratulate you upon the heights to which your minute observation and accurate interpretation of symptoms has led you and glory with you in your fidelity to the Hippocratic oath.

For the past three years at Trenton we have had a great contest for the maintenance of decent and intelligent standards, a great contest to protect the standard of medical and surgical knowledge so that advance may be made; to preserve, defend and continue the progress of medical research so that scientists might pierce the dark future, and bring to light, year after year, antidotes for dread disease and continue the discovery of important remedies, in order that bodily suffering may be diminished and human life spared. Not to me alone belongs the credit of the success of this fight, but to others of my colleagues in the Senate and House, who, in their steadfastness and belief in the medical profession of the state, have stood for the principle of correct practice, to the New Jersey Medical Society and its legal committee, headed by Drs. Halsey, Bennett and others, and to many individuals in your profession who by argument, eloquence and truth-telling and to constant attention and devotion belongs the credit for the defeat of this perilous legislation.

To assist in this, to be a temporary agent, a cog in the wheel—one of the integral parts, has given me much satisfaction, and now, at the end of my first term as a Senator from Somerset, I would say it has been a high privilege and a sacred duty to assist the medical profession of the State in their efforts for wise and proper legislation, and, if no other honors are to come to me, I can rest content in private life with the feeling that in some measure, at least, I have been performing my duty to mankind. If it should be the good fortune of some learned doctor or surgeon, in the future, to discover some antitoxin or remedy or plan of surgery which shall further relieve suffering, I shall feel that by throwing no obstruction in his way, by fighting



against others so doing, and giving medical science full leeway, I, myself, have contributed in a small way to the health and welfare of our state and country.

Much constructive legislation has been attempted during the past three years. Some has been successful, while some has not. A comprehensive pure food law was passed. It is not perfect. It will have to be moulded to conform with New Jersey requirements as time goes on. I want to stop right here and give credit for this splendid piece of legislation to the State Board of Health and to Dr. Henry Mitchell particularly. Patiently and earnestly he worked on this measure, and to him I give much of the credit. In his administration of the Health Board he was one of the best servants of the people New Jersey has had in any department. He was weak in politics—and I admire him for it—but strong in his devotion to the interests of the people. Let us hope promotion awaits him in the near future.

We take great pride in New Jersey institutions for the care of her sick, in her splendid system of charitable institutions—let us remember there are few, if any, institutions supported by private charity. I think during my term the opening of the Tuberculosis Sanitarium at Glen Gardner shows the broad and humane feature of the State's generosity. Here may go those curable and be taught to care for themselves, have their disease arrested, and take up their bed and walk. Great improvement has been made in the sewerage laws. Some anti-pollution laws failed, for which we are sorry. Dr. Coit's measure, an act to form medical boards for certifying milk—introduced too late in the session and in too crude a form; the slaughter house inspection bill, creating certain rules for slaughter houses concerning their sanitation and construction and inspection of meat slaughtered—this passed the Senate but met a violent death in the house, being opposed by certain interests in Newark, and I regret to say through the agency of two members of the medical profession from that city, who were serving in the legislature, no attempt being made to amend it, they defeated the principle of the bill. Among the laws which failed, for which we are not sorry, was the anti-vivisection bill. I was somewhat interested in this because Rockefeller's Laboratory was in my county, but particularly because my life had been saved in a serious operation for appendicitis in Chicago, by Dr. Senn,

and I know that his great knowledge of surgery had partly been gained by his operations on animals—particularly his observations of gun shot wounds. By sheer argument the doctors prevented the reporting of the bill and brought tears in the eyes of the committee, and Dr. Hare's and others great speeches of protest had their good effect, and it was shown that humanity and sanity still prevailed in the legislative halls of New Jersey.

And then as to the osteopath bill, I think the demands made by this cult in the bill presented at the last two sessions were an insult to human intelligence and dangerous to the health of the people of the State. Other similar healers could as well be granted the privileges of state licenses as these osteopaths. I claim that it is an awful responsibility to place on the legislature to ask them to depart from the safe and sane methods which have prevailed for years and place the lives of the citizens of the State of New Jersey under the care of those incompletely equipped mentally to prescribe a remedy or administer medicine. By reason of the eloquent appeals of the doctors, the contest resulted in an open rout. They have quit the field temporarily; that they will be back again no one doubts, inasmuch as the recent decision in New York State will probably encourage them. I think that the doctors, however, should come to this realization, that if they prescribe and recommend osteopathic treatment, then there is some benefit in the practice of osteopathy as in all massage and that a compromise might be made which will legalize their profession, placing them under the control of the State Medical Board, which shall control the requirements of the practice, providing that they shall not be allowed to give birth and death certificates and that osteopaths be examined in the requirements of their special profession alone, and be not allowed to practice beyond that sphere. This question will always be a menace and unless it is met and sensibly and sanely solved, some legislature at some time might give way and evils be written in the law which would be detrimental to the health of the people of the State. I feel, therefore, that some consideration of the claims of these men should be made, not to make a surrender of principles, but to prevent a possible overthrow of the high standards which at present prevail in the practice of the State. It has often been asked why patients take up with these new methods of healing. The reason

is because these doctors sympathize with **their** anxiety and talk to the patients about their illnesses. Are not doctors nowadays, with their advanced learning and large practice, too mechanical and too indifferent? Often a display of interest, a word of sympathy, a fellow feeling for the patient, will sometimes produce as good results as a dose of medicine. The other fellows are good politicians.

I appreciate as one of the highest and greatest compliments that a legislator can have, the feeling of confidence you have reposed in me. I am simply a legislative agent, a citizen trying to do his duty—to do what he thinks is right. I possess no medical knowledge, simply a desire to help those I believe in. It has sometimes been said that medical men ought to get into politics. Possibly this is so. But I doubt it. You cannot have two professions. In this state, in the last election, a large proportion of the mayors of the cities and boroughs were doctors. I think doctors in the political sphere do good, as sanitary and healthful conditions and pure water are necessary to every community and the experience of the doctors can be used in this direction for the benefit of those communities. The members of the medical profession compose one of the noblest classes of persons that exist among our citizenship to-day. Their methods of healing have prevailed through centuries, while others have often failed. They have been patriotic, ever ready to follow the flag and do their duty for their country on the battle field, their devotion in the hospitals has been grand and by their charitable works have alleviated suffering and preserved life. To no other class belongs this record, nor has anything been substituted to take the place in the healing art of regular medical science. To me the doctors seem on the same plane as ministers of the Gospel. They do more good than ministers of the Gospel sometimes, and with the higher example of Him who went about healing the sick they come in closer touch and sympathy with patients than the ministers do with their congregations. To the medical profession of New Jersey I raise my glass. May it always maintain its high standard. If it lies within my physical or mental power in the span of life that is still allotted to me, I shall always be found on their side, fighting for practice as against pretense, honesty as against buncomb, truth as against error.

Dr. T. R. Chambers, on behalf of the

members of the New Jersey State Medical Society, made a motion that the thanks of the society be extended to the gentlemen whose eloquence they had enjoyed. It was seconded and carried by a unanimous rising vote.

## MEDICAL JOURNAL EDITORIALS.

THE HOBBIES OF PHYSICIANS.

(From the Journal of the American Medical Association, Sept. 5, 1908.)

Hobbies, apart from medicine, should be developed by the physician during his virile years; so that in the afternoon and evening of his life they will sustain and comfort him, and provide such light interest and occupation as are essential to most venerable men who have in their prime been of a robust and achieving habit. Many examples from the varied walks of life, of such fads and hobbies, come at once to mind. Salisbury knew much of electricity, Gladstone of Homer, Chamberlain of orchids. Balfour is immersed—literally, some fear—in psychic research; Lodge has become absolutely submerged in this regard. Joseph Choate knows a great deal more than the law; that is why he is so excellent a lawyer; and why it has been said that there are three kinds of lawyers—those of the old school, those of the new school, and Choate. Billroth was a superb pianist; Strümpell is a clever violinist; many among our colleagues are excellent performers on musical instruments, and are all the better surgeons and physicians, for their genial and humanizing accomplishments, all the better qualified to comprehend the sufferings they must alleviate. To have a hobby of any sort, one need not be a producer or originator; to be an appreciator will be all-sufficient. Especially with regard to literature and the arts it would be well that the ambition to be original should not generally prevail; "tis better so," we might well observe with Mulvaney, when we reflect on the present appalling literary overproduction. We had best offer up all our originality to Medicine, who is an exceedingly jealous mistress; as one will surely find who would presume to exalt his hobby from the secondary position it should occupy, above her claims. But we can all be appreciators. A taste for literature is one of the greatest sureties of a happy old age. There was a man who, having read but one of Thackeray's books, deliberately refused to read any of the others, reserving for his later



years substance so productive of quiet pleasure. Another old gentleman kept a diary, in which he preserved carefully the dates when he saw the first buds on his trees; when the first robin appeared; when he heard the first bobolink. "Do not," says Osler, "become too deeply absorbed in your profession to exclude all outside interests. No matter what it is, have an outside hobby. When tired of anatomy refresh your minds with Holmes, Keats, Shelley or Shakespeare." And to these may well be added the works of our fellow professionals, Oliver Goldsmith, Sir Thomas Browne, Weir Mitchell and Sir James Paget. It is the all-'round man who succeeds best, in medicine as elsewhere—the physician who is thoroughly informed in his own work, and who knows, besides, something regarding the things which are vital to others.

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#### GOOD ROADS.

(From the *Maryland Medical Journal*, Sept., 1908.)

From many points of view the recent movement for better highways is of interest to the medical profession. It is a sign of increasing intelligence in the community at large—the substitution of reasonable for unreasonable methods of doing things. It is a sign of farsightedness on the part of our legislators—the substitution of that which is permanent for that which is shift. It brings our State abreast with the older civilizations of Europe, and, indeed, of our sister States which have enjoyed greater wealth and better physical advantages. It confirms Maryland in her leadership of the South, where such wonderful commercial changes are being wrought.

Undoubtedly the good roads movement is but one of many signs that the country dweller is at last to have his innings. For a century, perhaps, the city has had all the advantages, and the country youth have been forced to emigrate thereto for business success. The energies of the State and nation have been absorbed in the problem of infant feeding of the clamoring manufacturing industries that were daily brought to birth in its busy incubators. These babes are now too big for the nursery, and a far saner and safer method of promoting the farmer's interests, heretofore neglected has been initiated. Instead of putting exorbitant protective tariffs on special farm products to

encourage their production, the National Government confines its attention in this new era to the promotion of soil-culture in general, and of the redemption of unused lands wherever found. \* \* \* Good roads will mean to the country doctor, apart from any interests he may personally have in farming, a saving in time, a saving of wear and tear on horse and carriage, a saving of danger from accident to himself and family, a saving of nerve-strain, and a doubling of practice radius. Moreover, with fine roads he may gain many new and well-to-do patients among those who will settle in the improved territory.

The proper resurfacing of our local roads will take a very long time, but we may expect that people in every part of the State will be stirred to more intelligent work on roads. A very small expenditure of intelligent engineering would take the worst and most horse-murdering hills from our roads. A little broader public spirit would insist on the subordination of farm outlines to highway interests.

Every country practitioner should be a leader in the promotion of this most laudable movement.

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#### HONESTY IN ADVERTISING.

From the *A. M. A. Journal*, Sept. 12, 1908.

The underlying principle of the campaign against fraud and misrepresentation in the proprietary medicine business is honesty in advertising. The essential requirement is: "Tell the truth—the whole truth." It would be difficult to formulate a simpler or more reasonable demand, and yet in spite of its simplicity—or is it because of it?—the opposition to the propaganda for reforms in proprietary medicines has been enormous. This has come not only from manufacturers whose methods and products alike were fraudulent—from such, antagonism was expected and desired—but also from firms of high standing who have insisted, to all intents and purposes, that honesty in advertising is Utopian and visionary. The reason for this attitude is not far to seek. The belief expressed not long ago by the *Cumberland Presbyterian*, that "virtually all advertisements are lies" (Quoted from *Literary Digest*, Sept. 21, 1907, 412.) has been very generally held. Commerce has sanctioned "justifiable exaggeration" so long as it is impossible to decide where "justifiable exaggeration" ends and actual lying and fraud begin. Because of the peculiarly vicious results of such a

policy in connection with advertisements of medicinal agents the medical profession went at the problem vigorously with the aid of the Council on Pharmacy and Chemistry. About the same time, *Collier's Weekly*, in the Great American Fraud articles, took up the fight for honesty and decency in regard to "patent medicines," and at last the public awoke to the true condition of affairs. This awakening of the public conscience was materialized in the Food and Drugs Act, a law which has indirectly made the advertising of foodstuffs comparatively free from fraud. Manufacturers of worthy products within the province of the act have had their eyes opened to the fact that truthfulness in advertising is a splendid asset and that the unscrupulous manufacturer and the competitor with an inferior product are being eliminated. This having been demonstrated, manufacturers in other commercial lines are beginning to take action for the restoration of commercial morality. Such a policy was foreshadowed in the resolutions adopted by the Associated Advertising Clubs of America last winter, which was referred to at the time. (*THE JOURNAL*, A. M. A., Feb. 29, 1908, p. 703.) Another notable proof of this awakening is seen in the recent action of the National Association of Piano Dealers. This body has endorsed and distributed an appeal for the prevention of fraudulent advertising in its own domain, in a series of resolutions which are presented elsewhere (Miscellany Department,, page 932.) in this issue.

This action of the piano dealers' association was taken in consequence of a remarkably able address by Lewis H. Clement, at its annual convention recently. In his prefatory remarks Mr. Clement said:

"A salesman who, through misrepresentation, persuades a customer to buy a thing he does not want, in belief that it is what he does want, deserves dismissal, and a firm which permits such misrepresentation deserves public condemnation. To publish misleading advertisements which not only deceive a large number, but tend to undermine that confidence on which all business rests, is far more discreditable and deserving of condemnation. Dealers insist on honest statements from manufacturers and their representatives. Their customers' rights are no less."

We may now expect other branches of commerce to take action on the subject of fraud and misrepresentation in advertising in their own particular lines. It may thus come about that at no far distant date we

shall see commercial morality liberated from the slough of trickery and deceit, and planted on the firm ground of honesty and square dealing.

Meanwhile we may congratulate ourselves on the fact that so far as our own special aspect of this crusade is concerned, the widening circles have passed beyond the confines of this country. We cordially hail our new allies in the world of general commerce, for every step gained by them means the breaking down of so much entrenched resistance to the propaganda for honesty in the promotion of proprietary medicines.

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#### ADVERTISING.

(*From the Illinois Medical Journal*, Sept., 1908.)

Look again at our advertising pages. We have previously written of the elimination from our pages of all advertisers whose products have not been passed by the Council on Pharmacy and Chemistry of the American Medical Association. This campaign for clean advertisements in your Journal, although it entails the loss of hundreds of dollars which might be obtained, nevertheless is to the credit of the medical professional of Illinois. It is to our mutual interest to have the Journal make for all that is scientific in the practice of medicine. All, for too long a time, the nostrum venders have repeatedly filled with their advertisements the advertising pages of reputable journals. We are now in our second year of clean advertising and as rapidly as possible contracts with firms whose advertisements were objectionable were cancelled. We ask cooperation in building up the business department of your Journal by giving your support to those who advertise in it. It is very little trouble to mention in your letter to the firms from whom you purchase that you saw their advertisement in the Illinois Medical Journal. Likewise it is only fair that you should give your advertisers a fair share of your business. We cannot obtain new business unless we can assure our advertisers that it pays to take space in the Journal. It is entirely a business proposition with them, and it lies with you, the readers and likewise owners, to see that it pays to advertise in the Illinois Medical Journal. Be fair, and when you desire to purchase an article give our advertisers the preference if they can show you that their goods are equal to or bet-



ter than you can buy elsewhere. The greater the number of advertising pages the greater are the possibilities for broadening the scope of the work of THE JOURNAL. It costs considerable money to publish and print a publication such as this one, which you are obtaining at a very nominal cost. Your cooperation in the business department, as well as in all other departments, is not only solicited and desired, but indeed, is one of your privileges.

### ARTICLE FROM THE SOUTH CAROLINA JOURNAL.

The following appeal, issued by the Journal of the South Carolina Association is sound. Will the members of our California Society follow the excellent suggestion?

*To the Owners of this Journal, the Members of the South Carolina Medical Association:*

You know that reciprocity encourages business don't you? Outside of common decency, and leaving aside mere etiquette, it's good business to stick to your friends, isn't it? Now, who is your friend?—the smooth-tongued spiel-artist who swears undying love and admiration for you as long as he is in your hearing, and laughs behind your back at your ease, gullibility, and willingness to do business with him at an expense to himself of nothing more than a few lungfuls of hot air? Or is your friend the fellow who thinks enough of you to support your efforts for betterment and puts up his fair share of cash for the promotion of straightforward business intercourse with you, and for the stimulation of legitimate professional business and its accompanying trade?

The last, you say? Certainly. There are no hopeless idiots among the owners of this Journal.

All right; so far, so good. But what are you doing for your friends who are helping you in your work? And what will you do for the pretenders who are "working" you for their own help?

Read the following colloquy, which actually occurred very recently in our hearing:

Affable Salesman, entering Doctor's office: "Doctor, I am representing the Blank and Blank Laboratories, of Analaska, and I have a very elegant preparation, of which I am going to leave you samples, of the best, positively the very best, most scientific mixture of laxative salts ever offered to

your discriminating profession. This is—"

Doctor, interrupting: "Does your firm advertise in the Journal of our State Medical Association?"

Salesman, with pained surprise: "Er—no. Why do you ask?"

Doctor, cheerfully: "Oh, because there's really no reason why we doctors should support a firm that is not willing and ready to support us in our efforts to better existing conditions."

Salesman, affecting indignation: "Do you mean to tell me, sir, that simply because a firm does not advertise in your Journal, you refuse to consider or test its products, no matter how superior they may be—no matter how many lives they may save?"

Doctor, sweetly: "My dear man, how many firms in this country put out the best product on the market? And how many of them come in here to tell me all about it? Do you suppose for a minute that I, or any other doctor, has time to try them all on their merits? Do you, now, eh?"

Salesman, unwillingly: "Well, no, I don't suppose you have."

Doctor: "Very good. Then isn't it reasonable and proper that what testing and patronage we have to place should favor first the firms that maintain close business relations with us—our business friends?"

Salesman: "Yes, I guess that's true. I am going to take this matter up with the house. What's the Journal's business address?"

Now, the point is that the Journal needs the support of good ethical advertisers; and if every doctor who is part owner of the Journal will pursue the above line of thought, speech and action, the effect would be magical. As long as these houses think they can work us without advertising, they will hold back. It is up to us, every one of us, to treat them as if they were from Missouri, and show them! By doing this we are at the same time giving loyal support to those houses that are represented in our pages, which is only decent and proper. They are the ones to whom we should always give preference, and we again urge all of our joint owners to follow up this principle and always to insist distinctly when buying supplies, that you wish and will have our advertisers' products—there are none better.

We have a most wonderful and estimable concord of thought in the profession of our State. What remains to be acquired is unity of action. Are there brains and en-

ergy enough in our membership to accomplish it? We think so.

"A GOOD EXAMPLE."

*From the California Medical Journal, September, 1908.*

Elsewhere we print a circular letter which went to all the members of the South Carolina Association, in their journal, and it is well worth your careful consideration. Do not the same conditions apply to your own JOURNAL? There is no earthly reason why reputable manufacturers whose products we use should not support your own JOURNAL if they do any advertising at all. And most of these manufacturers do advertise in the privately-owned journals of the various states. Why do they advertise in these journals and not in the state journals? Every state association journal has a larger bona fide circulation within its state than has any privately-owned journal. It can not, therefore, be the lack of circulation which influences the advertiser. What is it? Can it be that the manufacturers do not care to aid in making permanent the state journals? Can it be that they would rather support the journals whose reading pages, as well as whose advertising pages, they can buy? Can it be that they have some hope that through lack of support the state journals will not live and the present movement for reform will stop? Why not reciprocity? If we support a manufacturing house, why not insist that that house support your JOURNAL? It places its advertisement in journals which are *fighting against* our campaign for honesty in *materia medica*; why not place it in your own JOURNAL which is fighting for honesty? Every honest manufacturer who is really dealing in good faith with the medical profession, and who advertises at all, should support the journals representing the profession by advertising in them; if he does not, but rather chooses to advertise in the published-for-profit medical (?) journals, what is the reason? There is something very peculiar about this; should we not try to find out what it is?

THE ETHICS OF ADVERTISING SOLICITING FOR MEDICAL JOURNALS.

*From Editorial in the Medical World September, 1908.*

(The editorial is too lengthy to give entire. It sharply criticises the attitude of the Journal of the South Carolina Medical Association. We give two of the closing paragraphs.—Editor.)

Proper and honorable commercialism is all right in its place; but its place is not in

the editorial department of a medical journal, particularly of medical journals that are the official and supposedly dignified organs of great and honorable medical associations. So I again exhort the members of the South Carolina State Medical Association to protest against coarse and brutal commercialism, partaking of the features of the boycott, appearing in their official organ; and I exhort the members of certain other state associations to demand that their official organs shall be kept up to the high and non-commercial standard of the best of these organs, which is high—say up to the Pennsylvania standard, or the Illinois standard. And members of state societies should insist that their official organ shall not have to depend wholly nor chiefly upon advertising for its running expenses. This is worse than for a so-called "independent" journal to be "dependent absolutely on its advertising income." Doctors are able to pay for their journals, whether they be official organs of their societies, or independent publications; and publications of either kind that are not thus paid for deserve to be suppressed; and advertisers could do it by withdrawing the "prop"; and the Post Office Department could do it by applying the new regulations. I hope they will both "get busy," for the profession will lose nothing by losing what its patronage does not call into existence nor justify, and advertisers would gain by not having to prop up publications not sustained by the patronage of the profession.

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Later: In the August number of the California State Journal of Medicine, page 256, the South Carolina Journal matter is fully endorsed, and the members of the California Medical Association are urged to do the same thing "and stick to it." Thus the South Carolina Journal does not stand alone in the above illustrated methods and ethics of obtaining advertisements. Others not so mild mannered as the writer of these lines would apply very ugly words to these methods and ethics. I will leave this for others to do if they wish. The California Journal editorial above referred to is too scurrilous and insulting to quote. It seems to me that the members of medical associations would demand that their journals be conducted at least in a gentlemanly manner.

(We insert these editorials on advertising in order that our readers may know the views of others, not because we fully endorse them. See our editorial columns.—Editor.)



## DAILY PRESS AND MAGAZINE ITEMS.

(From *Collier's Weekly*, N. Y.,  
July 28, 1908.)

### WHAT IT MEANS.

"How many understand the real meaning of disease in the universe? What imagination can grasp even the direct suffering it causes, to say nothing of the indirect? How much does the decreased deathrate of children mean to women in this world? The population in the future will be kept up with a fraction of the births needed in the past. Many times fewer small children will die; the length of life for adults will be still farther extended; those who live will know infinitely less suffering. The average length of life has already been increased from twenty-one and a quarter years in the sixteenth century to forty and a half in the eighteenth. The death rate from diphtheria has been reduced from 40 or 50 per cent. to less than 10. The British in the Boer war lost from typhoid more than those killed by wounds received in battle. In the Spanish war one-fifth of the soldiers in our national encampments had typhoid, and the present situation leads experts to believe that in another war this record would be repeated. How easy it is to avoid, however, was shown by the Japanese. General Oku, in an active campaign of seven months, had 187 cases to 100,000 men. Furthermore, the Japanese learned so much between the Chinese war and the Russian war that dysentery was about one-sixth as prevalent, malaria about one one-thousandth, and the cholera cases diminished from 7,667 cases to none. Many of us are able to remember when yellow fever raged; in 1878 in Memphis, a city of 19,500 people, there were 17,600 cases of this disease, with 6,000 deaths. General Wood said that the discovery of the method of transmission of this disease resulted in the saving of more lives each year than were lost in the Cuban war. Before Jenner's discovery, smallpox killed one-tenth of all the people on the globe and disfigured nearly twice as many. Since then it has existed only because of prejudice against vaccination. In Prussia, where vaccination is compulsory, the mortality has been reduced to one in about 300,000. In Paris, on the other hand, where vaccination is not compulsory, between 1870 and 1895 there were over 20,000 deaths. Before the discovery of Yersin's and Haffkine's

serums the mortality from bubonic plague was over 90 per cent. In London alone, in 1348, 100,000 fell victims to the disease. These are a few examples which show what intelligent study means in the sum of human misery and happiness."

### EXPRESSED IN DOLLARS.

"Now put it into money, this same saving to the race through intelligent observation. Hunter has estimated the average cost of preparing a man for usefulness at \$1,500. The loss of 400,000 workers, which occurs every year from diseases that are preventable, represents, therefore, an annual loss to the country of \$600,000,000. On Hunter's estimate, the lowered death rate of England in about ten years would mean a capital saved of \$1,285,206,000. The epidemic of 1891-'92 cost Philadelphia an estimated loss of about \$22,000,000—to railways, hotel-keepers, merchants, manufacturers—for care of sick, loss of time, and expense of burial. A policy of prevention, on the other hand, would have cost about \$700,000. The discovery of the yellow fever mosquito is supposed to save us more money in each single year than was spent upon the entire Cuban war. If we could master tuberculosis the saving in money in the United States would be \$330,000,000 per year. Is it any wonder, then, that the best physicians are heart and soul in the study of prevention? Dr. N. E. Ditman, in the *Columbia Quarterly* for June, has a powerful plea for a school of sanitary science and public health. To the large body of millionaires who are regular *Collier* subscribers, that essay is sincerely recommended."

### WHAT SHALL WE EAT?

From *Good Housekeeping*, January, 1908.

"What can a woman of average intelligence do when one authority advises no meat in the family dietary and another as reputable just as strongly advocates 'all you want of every kind but condiments, for even salt is discovered to be a poison'? I want to feed my family so that they will be in the best physical condition; so that the growing children shall build up the best and strongest bodies; so that the adults may do the best work with the least fatigue. What can I do?"

*Doctors Disagree.*—The position is not too strongly stated. Not long ago two men, both prominent and both authorities, good naturedly argued the subject of an ideal diet. One, altogether generous in physique, stood for the comfortable theory that man does not eat too much, except on holidays, when he balances matters during the next two days. His opponent, an evident scholar, but, curiously enough, small in stature,

as strenuously contended that Americans were killing themselves by overeating. Between the two schools thus represented it is not a question of a vegetarian or mixed diet—the source of food supply is, after all, a purely individual matter—but of the amount which the body needs and can cope with.

Back of the first man is the brain and sinew of past generations who have consistently practiced his comfortable theories; back of the second is the fact that civilization and so-called culture have produced a race of men and women with seemingly new requirements, physical as well as mental. Supporting him also is a series of remarkable experiments conducted at Yale University, whose results show marked improvement in the physical endurance of men of all types, who cut their rations practically in half.

*The Two Sides.*—The advocates of a liberal diet made certain experiments, learning the diet naturally chosen by a large number of men living practically the same kind of life, and tried this diet upon individuals, by means of a delicate mechanism learning the precise amount of energy obtained from any given bill of fare.

The advocates of a more sparing diet argue that the assimilation of proteids (including meats) leaves substances of which the system must rid itself, thus entailing labor upon the kidneys and other organs—more labor, they believe, than the body is made to perform. When the wearied organs fail in this performance, the result is gout, rheumatism or other disease. There are proteids in some vegetables, but there is little risk of an excessive proteid supply in a vegetarian ration. The experiments made by this class of scientists, however, lack the exactitude of those made by the first school. Their conclusions have been that men in all conditions of life gain in strength and in powers of endurance on a lessened food supply.

*Animal Versus Vegetable.*—Undoubtedly there is a tendency to minimize the value of vegetables in the diet. Because of ignorance of new varieties and methods of preparing, but more especially because vegetable cookery requires more care, time and manipulation, vegetables have been slighted. From a strictly vegetable diet, all the necessary food principles may be obtained, it is true, but at a real, economic waste of material and energy. It is necessary to eat a much larger amount of vegetable than of animal food in order to obtain the necessary amount of nourishment. It is calculated, after careful experimenting, that while only 3 per cent. of the proteid or flesh-forming material of animal food escapes digestion, as much as 17 per cent. of the same material in vegetable foods is thus wasted. In a critical convalescence or protracted fever, the physician relies first on milk, uncooked egg whites, broths and the more stimulating animal foods. Even gruels are not so well borne as the foods mentioned, save in special diseases.

*Vegetables Not Much Cheaper.*—The economy in money of the vegetarian diet varies considerably with the section of the country; rarely is the vegetarian appreciably cheaper than the mixed diet, while the housekeeper undertaking it must be prepared to spend more thought to make the ration a balanced one, and more time and labor to make it palatable.

The housekeeper pays a higher price for beef than for peas, beans or lentils; in part because the beef creature has spent his time and energy storing up the nourishment of his ration in animal

tissue, a form of proteid which is more easily digested than vegetable proteids.

Because meat proteids are more easily digested, more palatable and to most people more satisfying, there is a tendency to make them the most important food in the diet. There is little doubt that meat three times a day is too much for the average man; twice a day, at most, is allowable, and for an adult with strictly sedentary work, meat served once a day will furnish an ample proteid supply. Active, growing children may eat meat twice a day. It is, with normal, healthy adults, more or less a question of individual health and experience how much meat should be eaten.

Horace Fletcher, exponent of thorough mastication, has touched upon a most important and prevalent evil: Americans, as a rule, eat too fast; cation, has touched upon a most important and which the body needs, and which should not be delegated to the patented processes of malting and predigesting, save in cases of invalidism, when this temporary help is needed. In other words, in case of such foods—many of them excellent—do not slight the process of mastication.

The amount of sugar permissible in the diet has long been the favorite theme of popular writers on food.

## AMERICAN PUBLIC HEALTH ASSOCIATION.

Thirty-Sixth Annual Meeting, August 25-28, 1908.

A largely attended meeting of this Association was held at Winnipeg, Manitoba, August 25-28, Dr. Richard H. Lewis, of Raleigh, N. C., the president, in the Chair. An abstract of the president's address is given in the *A. M. A. Journal*, as follows:

Dr. Richard H. Lewis, Raleigh, N. C., pointed out the difficulties in the way of establishing a national department of public health in the United States by the dual nature of the government and the distribution of constitutional powers:

It is unquestionably to the interest of the general cause that each state should look after its own health work, acting always in a spirit of cordial co-operation with the great national bureau, which spirit the latter should be careful to foster and encourage in every way, not only to its own interests, but to those of the whole country. It would not be at all difficult so to conduct the national bureau as to have the state boards look to it as both guide and friend. In a general way the kind of national bureau of health we ought to have, and the kind most desirable, is one including within its scope and management all of the specific health agencies of the government now in existence, with the addition of others when needed, so thoroughly manned by the best men in their respective departments, and so richly endowed with funds that work of the highest class in demonstrating the principles underlying all subjects bearing on the public health can be done. Having by the study of the work of others and by original research settled on the correct principles of sanitation, it should make a practical application of them to the actual every day problems of preventive medicine in the sanitary management of the District of Columbia and the territories



over which the United States has absolute control. It should give a clinical demonstration of the best methods as carried out by its own thoroughly educated and trained health officers. But it is as a source of information and education that we find the chief value of the bureau. First, in the education of its own officials and the health officers of the country; second, of the medical profession, and, third, of the people. In a bill now pending in Congress further enlarging the powers and duties of the Public Health and Marine Hospital Service, authority is given for the establishment of a school of hygiene for the training, free of charge, of such health officers as may choose to attend. The granting of a certificate is allowed, but it should go further and grant the degree of Doctor of Public Health, as is done in England. In this way we might hope for the gradual development of a sanitary profession of equal dignity with that of medicine or the other regular professions.

Reports were presented on: Ophthalmia Neonatorum; Standard Methods for the Diagnosis of Rabies; Standard Methods of Chemical Analysis for Water and Sewage.

Papers were read: Vaccinating and Humanized Lymph; Preventing of Smallpox; Typhoid in the Province of Manitoba; Epidemiology of Typhoid Fever; Typhoid Fever in Richmond, Va., with Certain Conclusions Relating to Typhoid Fever in the South; Commercial Pasteurization of Milk; Result of Reincubation and Reinoculation of Atyypical Diphtheria Culturei; Stability and Putrescibility in Sewage Filter Effluents; State Control of Public Water Supplies; Means to Promote the Health of School Children, etc. These are abstracted in the A. M. A. Journal of Sept. 12.

Resolutions were passed in favor of a Model Registration Law, and of legislation by Congress to enlarge the scope and efficiency of the Public Health and Marine-Hospital Service.

The following officers were elected for the ensuing year: President, Dr. Gardner T. Swarts, Providence, R. I.; first vice-president, Dr. R. M. Simpson, Winnipeg, Manitoba; second vice-president, Dr. Jesus Chico, Mexico City; third vice-president, Major Charles F. Mason, U. S. Army, Washington, D. C.; secretary, Dr. Charles O. Probst, Columbus, Ohio; treasurer, Dr. Frank W. Wright, New Haven, Conn.

Richmond, Va., was selected as the next meeting place.

## AMERICAN NEUROLOGICAL ASSOCIATION.

The Twenty-fourth Annual Meeting of this Association, which was held in Philadelphia, Pa., May 20-22, 1908, Dr. Charles W. Burr presiding, elected the following officers for the ensuing year: President, Dr. S. Weir Mitchell, of Philadelphia; First Vice-President, Dr. Pierce Bailey, of New

York; Second Vice-President, Dr. F. W. Langdon, Cincinnati; Secretary and Treasurer, Dr. Graeme M. Hammond, New York; Councillors, Drs. H. M. Thomas, of Baltimore, and Charles W. Burr, of Philadelphia.

The next meeting will be held in New York, the date to be determined by the Council.

## FOUNDERS WEEK.

225TH ANNIVERSARY OF THE CITY OF PHILADELPHIA, OCTOBER 10, 1908.

### Medical Day, Thursday, October 8th, 1908

EXERCISES BEGIN AT 10 A. M.

At the Walnut Street Theatre, Ninth and Walnut streets, Philadelphia.

Report of the Committee on Scientific Institutions, Colleges and Hospitals, by John V. Shoemaker, M. D.

Report of the Committee on and Editor of the Volume of Scientific Institutions, Colleges, and Hospitals, by Charles K. Mills, M. D., and Frederick P. Henry, M. D.

Report of the Committee on Historical Exhibit, by Joseph P. Remington, Ph. M.

Report of the Committee on Medical Day, by L. Webster Fox, M. D.

Address on the Medical Colleges and Allied Institutions of Philadelphia, by Professor George A. Piersol, University of Pennsylvania.

Address on the Great Hospitals of Philadelphia, by Professor John C. Da Costa, Jefferson Medical College.

Address on the Development of Practical Medicine in Philadelphia, by Professor James M. Anders, The Medico-Chirurgical College of Philadelphia.

Other eminent scientists are expected to be present and address the meeting in commemoration of the 225th anniversary of the founding of the City of Philadelphia, and in celebration of the growth and development of the scientific institutions, colleges and hospitals of Philadelphia.

The medical profession and members of all other scientific bodies and the public are invited to attend the meeting. Visitors are invited to see the historical exhibit of relics from the scientific institutions, colleges and hospitals of the city.

FRANK WOODBURY, M. D.

Secretary.

JOHN V. SHOEMAKER, M. D.,

Chairman.

### Address by Surgeon General Rixey.

Surgeon General Presley M. Rixey, U. S. Navy, will address the Essex County Medical Society, in the Newark Public Library, at 8.15 P. M., October 13, 1908. Subject: "The Development of the Navy Medical Corps to meet the Modern Requirements of Specialization in Medical Practice."

**Philadelphia Pharmacy College Gives Degrees.**—For the first time in several years in this city the degree of Master of Pharmacy was conferred upon five distinguished men from different sections of the United States, who have attained distinction in the art of preparing medicines and drugs. Those who received this honor were Samuel W. Fairchild, of New York; Horatio Nelson Fraser, of New York; John F. Hancock, of Baltimore; S. A. D. Sheppard, of Boston, and William McIntyre, of Philadelphia.—*Evening Bulletin, Philadelphia.*

# THE JOURNAL

OF THE

## Medical Society of New Jersey.

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**OCTOBER, 1908.**

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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We regret that we have received no information from the County Medical Societies for this issue of our JOURNAL. Will secretaries please send to the editor notices of dates and places of meetings? Prompt reports of proceedings are also requested.

### TWO IMPORTANT MEETINGS.

Two meetings of the greatest interest to medical men, which should call forth large attendances from the members of our State Society, are the International Congress on Tuberculosis, at Washington, D. C., President Roosevelt presiding, which began its section meetings September 28th, ending October 12th, and the Medical Day, Thursday, October 8th, of Founder's Week, the two hundred and seventy-fifth anniversary of the city of Philadelphia, in that city.

The first mentioned of these gatherings is a triennial congress and it is the first time it has ever met in the United States. It will be a real World's Congress. The most eminent scientists from various parts of the world will take part in the discussions.

The Philadelphia celebration will be a memorable occasion, which will repay our members for the time given in attendance. The program for the Medical Day of the week's celebration, October 4-10, will be found in this issue of our Journal. We expect to give brief reports of these gatherings in our next issue.

### OUR EDITORIALS.

We are fully aware of the impossibility of writing an editorial that will express the views of all, or perhaps even of a majority of our readers. We certainly are not conceited enough to claim unerring judgment or superior wisdom when we express them. We go further and sincerely say that when we do express our opinions on matters of importance and any of our readers believe that our position is not for the best interests of the Journal or the profession, that they will frankly say so. We earnestly desire our readers to make far more use of our "correspondence" columns than they have. We welcome a communication from Dr. D. E. English, of Millburn, commenting on our editorial, in the September Journal, entitled "Advertising and Use of Proprietary Preparations," in which he says:

"The only excuse for any advertising is financial support. The Society should be willing to support the Journal without the aid of any advertisements except those of books, reputable hospitals or sanatoria, or honest mercantile ads. Proprietaries of all kinds should be cut out. \* \* \* If the manufacturer will not trust the physicians (in reference to giving accurate and full formulae of preparations—Editor), the physicians should not trust the manufacturers. Any physician who cannot write as good a formula as that of any proprietary on the market, is deficient in the knowledge that every physician should possess. The proprietary and nostrum evil, after all, in the final analysis, is found to rest on the ignorance, indolence, carelessness, haste and superstitution of the medical profession. It is our great reproach."

We shall not take issue with the doctor on these views, they reveal a thoroughly ethical practitioner, who takes exception—in the words omitted above—to two preparations which have been accepted as proper ads, one of which is endorsed by the A. M. A. Council and is admitted in its Journal. This confirms our statement of the "decided difference of opinion among the most ethical." As the doctor would accept ads from honest mercantile firms, we do not differ very much in our views. The treasury of the Medical Society of New Jersey would stand the elimination of all advertisements, but we question the wisdom of taking such action. If the society should vote to shut out all proprietary preparation ads we would not object. It would relieve



our Publication Committee of the difficulty experienced in deciding questionable cases. We are pleased to note that the doctor agrees with us—that it would be far better for the physicians to prepare his own formulae than to prescribe proprietary preparations.

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Just as we had completed our editorial matter for this month's issue, we received the September number of the *Journal of the South Carolina Medical Association*, and were pleased to find in its editorial columns an expression of approval of our views on "Advertising and Use of Proprietary Preparations," as follows:

"The following frank, dignified and manly statement of its position is uttered by the Journal of the Medical Society of New Jersey, for September, 1908. It is so thoroughly in accord with our own views, expressed from time to time, and according to our present lights, that we reproduce it in full":

Then follows our editorial. While always averse to flattery or fulsome praise, we are always pleased to have our views approved when we believe and our readers believe they express what is *true and right*, or what is good, sound policy for our Journals, our profession, our patients, or the State. When others differ with us, we shall always endeavor to have a calm mind, open to sound argument as to their correctness.

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#### OTHERS' EDITORIALS.

We have in this issue of our journal added a new department. Editorials from medical journals—in order that our readers may get the views of our brother editors on important matters concerning the profession. We may take occasion from time to time, as now, to refer to some of these in our own editorial columns, but we shall always try to remember that every editor is entitled to hold his own opinions and express them without being taken to task by us, or harshly criticised. We shall also seek to make our Journal better as we may

compare views and profit by others' suggestions, and if from each other we may gain wisdom that shall tend to raise the standard of medical journalism, advance the science and art of our profession, and increase the confidence of the public in the reliability and value of the opinions and testimony of medical men, we will thereby render valuable service to the profession and the public.

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#### JOURNAL ADVERTISING.

On pages 255-257 will be found editorials from the California, Illinois and South Carolina Medical Journals on advertising. With the views of the editor of the Illinois Journal as to the acceptance of advertisements from the nostrum venders and of the attitude of the members of the society toward advertisers in the Journal, we are in full accord. We maintain that the fact that ours is a clean journal—careful of the class of advertisements admitted—makes it a far more valuable advertising medium than it would be if, for the sake of meeting expenses, we admitted the nostrum venders' ads. Our readers *know* that we are bringing to their attention the preparations and goods of reputable houses that they can rely on, and of institutions—sanatoria, hospitals, etc., worthy of their countenance and support to which their patients may be safely directed. The proprieties of the case suggest that we patronize those who, recognizing the value of our journal as an advertising medium and the character of our members as intelligent and discriminating men whose patronage is worth soliciting, advertise in our journal.

We say these things, however, because we believe it is the right thing to do, not because "It costs considerable money to publish and print a publication such as this one." Will our members give these suggestions their careful consideration?

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With some of the views of the editors of the California and South Carolina journals, as set forth in the editorials referred to above, we must beg leave most respectfully to differ. While

acknowledging that plainly speaking it is none of our business what policies other medical journals adopt, yet as our California brother-editor assures us that the policy of the South Carolina Journal, which to us seems to savor of boycotting, is "A Good Example to Follow," we may be pardoned for saying that the Journal of the Medical Society of New Jersey must ask to be excused from "following."

We place our Journal before reputable advertisers on its merits as an advertising medium. Soliciting their advertisements? Yes, we believe it is to their interest to advertise in it. If they think otherwise we shall have no quarrel or hard words over it, and if we believe their goods are better than others, self-interest and the good of our patients ought to compel us, as true and honorable men and good physicians, to use them. We shall go right on trying to do our work in helping to build up the profession and advance the progress of scientific medicine. And we shall have no quarrel with, or say any unkind words against our **brother-editors who differ**, and have an undoubted right to differ, with us.

From what we have said it will be seen that we are not in sympathy with the spirit exhibited in the editorial from *The Medical World*, and yet in justice to the editor we say that the portion we have given in another column is only a brief extract from a lengthy editorial, containing what we deem the most objectionable part—as being unnecessarily severe, and therefore it is hardly fair that our readers should pass adverse judgment on the editor's harsh criticisms without hearing more fully the provocation that called them forth.

### GOOD ROADS.

We fully agree with the editor of the Maryland Medical Journal in the views expressed, as found in another column of our Journal. There is probably no State in our Union where more and better work has been done than in New Jersey, and done so as to be of light burden to the taxpayers, through State aid. We believe our doctors are all strongly in favor of this work, not

altogether from selfish motives—in saving of time and the wear and tear on horse and carriage, in gaining new patients and doubling the practice radius; but also, as public-spirited men and the most altruistic class of citizens—in favor of all movements for the betterment of temporal conditions—because they believe it means the development of our States resources, and the best interests of our patients, especially in the country districts—in securing the doctor's early presence in times of need, and also of our citizens generally when not in need of the doctor.

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We received from Dr. Exton, Secretary of the New Jersey Sanitary Association, too late for insertion in this issue of our Journal, the program of the Annual Meeting of the Association at the Laurel-in-the-Pines Hotel, Lakewood, N. J., December 4th and 5th, 1908. It will appear in the November issue of the Journal. It seems to indicate that this will be an unusually interesting and profitable meeting.

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Owing to the pressure of work at the printing office, we are compelled to defer one paper, the second prize essay and some other matter still uncorrected until our next issue of *THE JOURNAL*.

### THE CALL TO PUBLIC HEALTH.

Dr. W. T. Sedgwick, of Boston, Mass., says that the call for public health is not merely a call for individual welfare, it is also one of the primal social duties. He discusses it from the humanitarian, the moral and the economic sides, and says that the call to leadership in the public health service is a call to the educated everywhere, but especially to educated physicians. He eulogizes the services of the army and navy medical departments to the cause of public health, and particularly the brilliant achievements of the United States Public Health and Marine-Hospital Service. The relation of the physician, he says, to the public is rapidly changing. He will soon have to be as proficient in the art of prevention as in that of healing. While he will not have to build waterworks, sewerage, or other sanitary systems, to be an analyst of foods or a bacteriologist, save perhaps occasionally to boards of health, he will have to fulfill the ancient and honorable function of the medical man and remain the trusted and intimate medical adviser of individuals and of families in sickness and in health, and, more important still, he will have to prevent disease among individuals, families, and communities, by urging higher standards of living; by teaching temperance in all things; by advocating pure wa-



ter, pure milk, pure food, pure living. If it is in him to be an investigator and a leader, he will be one or both of these things. If not, he will be a frank and honest, but not captious, critic; he will mold and reform, if he cannot lead, public opinion.

## CLASSIFICATION AND NOMENCLATURE OF PULMONARY TUBERCULOSIS ADOPTED BY THE NATIONAL ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS.

**Incipient.**—Slight initial lesion in the form of infiltration limited to the apex of one or both lungs or a small part of one lobe. No tuberculous complications. Slight or no constitutional symptoms (particularly including gastric or intestinal disturbance or rapid loss of weight). Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest. Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent.

**Moderately Advanced.**—No marked impairment of function, either local or constitutional. Localized consolidation moderate in extent, with little or no evidence of destruction of tissue; or disseminated fibroid deposits. No serious complications.

**Far Advanced.**—Marked impairment of function, local and constitutional. Localized consolidation intense; or disseminated areas of softening; or serious complications.

### CLASSIFICATION OF RESULTS.

**Unimproved.**—All essential symptoms and signs unabated or increased.

**Improved.**—Constitutional symptoms lessened or entirely absent; physical signs improved or unchanged; cough and expectoration with bacilli usually present.

**Arrested.**—Absence of all constitutional symptoms; expectoration and bacilli may or may not be present; physical signs stationary or retrogressive; the foregoing conditions to have existed for at least two months.

**Apparently Cured.**—All constitutional symptoms and expectoration with bacilli absent for a period of 3 months; the physical signs to be those of a healed lesion.

**Cured.**—All constitutional symptoms and expectoration with bacilli absent for a period of two years under ordinary conditions of life.

## NEW YORK ACADEMY OF MEDICINE.

### The Edward N. Gibbs Memorial Prize.

The New York Academy of Medicine announces that the sum of one thousand dollars will be awarded to the author of the best essay in competition for the above mentioned prize.

The subject of the essay, as stated, shall be, "The Etiology, Pathology and Treatment of the Diseases of the Kidney."

Essays must be presented on or before October 1, 1909.

The three subjects mentioned in the title as above given need not be treated with uniform fullness, but new discovery or fruitful research will be considered the standard of merit. An essay must show originality in order to obtain the prize.

Each essay must be in English, typewritten, designated by a motto, or device, and accompanied by a sealed envelope bearing the same motto or device, which shall contain the name and address of the author.

The competition is open to the members of the regular medical profession of the United States. The essays shall be transmitted to The Committee of the New York Academy of Medicine on The Edward N. Gibbs Memorial Prize, 17-21 West 43d Street, New York City.

**Giving Up a Half-Won Battle.**—According to *The New York Times*, the health officer of Newark, N. J., has announced that the board has become so discouraged over the carelessness of the public in not helping to fight the mosquito pest that the city will make no further effort. He declares that the \$6,000 spent by the city already is as good as wasted, and that without the hearty cooperation of the public no advance can be made, mosquito-breeding places having been recently discovered in the heart of the city. One who expects to educate the public up to the point of efficient cooperation in sanitary work in one season, or in two, expects too much. Communities are already becoming self-conscious, and it is coming to be regarded as a reproach to any town to be plagued with mosquitos. The Newark people are learning, and their Health Board should not so quickly give up the good fight.

**The President on Isthmian Sanitation.**—In his letter acknowledging the receipt of a report of the special commission appointed to investigate the condition as regards labor and accommodations on the Isthmus of Panama, President Roosevelt expresses satisfaction with all that has been done there, and especially notes the success of Colonel Gorgas's work of sanitation. "The treatment of hygienic conditions on the Isthmus," he writes, "has been such as to make it literally the model for all work of the kind in tropical countries. Five years ago the Isthmus of Panama was a by-word for

unhealthiness of the most deadly kind. At present the Canal Zone is one of the healthiest places on the globe, and the work which is being prosecuted with such tremendous energy is being prosecuted under conditions so favorable to the health and well-being of the workers that the mortality among them is abnormally small."

#### Illegal Practitioners Cast Out of Missouri—

In the December *Journal of the Missouri State Medical Association* appears a report regarding the efforts of the State Board of Health and the medical profession of Missouri to revoke the licenses of various violators of the medical practice act. Besides Drs. Bye and Johnson of Kansas City, the revocation of whose licenses has been previously noted, the State Board of Health has revoked the licenses of Dennis R. Dupuis, alias Rupert Wells, and S. R. Chamlee, both of St. Louis. The evidence in these cases was collected by Health Commissioner Bond, through the various departments of the St. Louis Health Department, and was presented to the board by him with the assistance of the attorney of the St. Louis Medical Society, Mr. I. V. Barth. A number of other cases are now pending before the State board and will probably be disposed of at the next meeting. County Societies in other parts of the State are taking up the work of investigating and prosecuting illegal practitioners in their districts.

The *Journal* also publishes a list of persons and institutions located in St. Louis affected by an order of the Postoffice Department, denying them the use of the United States mails. Newspapers carrying advertisements of any of these individuals or institutions have also been declared unavailable. This list was given in *The Journal*, November 23, 1907, page 1781.

Most of these advertisements contained information or gave notice where abortifacients or the performance of criminal operations could be obtained. Newspapers containing such advertisements are not admitted to the mails, in accordance with the revised statutes of the United States and the regulations of the Postoffice Department.

In addition, the postoffice authorities have declared the following names to be fictitious, and mail addressed to them will be sent to the dead-letter office and not delivered: De Myers Dennis Medicine Company; De Myers Sanitarium, 2112 Olive street; Dennis Sanitarium, 2739 Washington street; North Side Sanitarium, 809 Belmont street; South Side Sanitarium, 2344 South 12th street; Galen Medical Institute, 1516 Chestnut street. Besides having their advertising thrown out of the papers and their mail cut off, all of the individuals connected with the above institutions, according to the *Missouri Journal*, have been convicted in the police courts of violations of the medical practice act or of the city ordinance.

The State Board of Health, the local medical societies, and the municipal health authorities are certainly to be congratulated on the good work which has been done. As the editor states: "A few more convictions and a few more stop orders by the Postoffice Department will cause the rest of these pests to depart with their wonderful discoveries and their sure cures to more fertile

fields." The question arises, however, whether any State will care to furnish the breeding place for this transplanted brood. The information given above ought to be sufficient to warn the physicians in any community and to enable them to prevent the people, each in his own town or State, from being made the victims of these proved frauds.

#### TESTIMONIAL BANQUET TO DR. EDWARD A. REILEY, OF ATLANTIC CITY, HOTEL CHELSEA, JUNE, 1908.

Dr. Edward A. Reiley, of Atlantic City, was tendered by his brother practitioners, June 30th, one of the prettiest banquets that it has been the lot of a resident of that city to receive, in the handsome dining room of the Hotel Chelsea. The occasion being the completion of 25 years of practice in that city. Not only were the medical men of the city and county present but prominent representatives of the law, ministry, judiciary, press, and business men of the city. The special guests of the occasion, beside Dr. Reiley, were Prof. Hobart A. Hare, M. D., of Jefferson Medical College, Philadelphia; Rev. H. M. Gesner, D. D., Dr. L. M. Halsey, Walt McDougall, Esq. The hotel had prepared an excellent menu for the occasion, which was served in the first-class manner for which this hotel is noted; the tables were beautifully decorated, at which more than fifty sat down.

Dr. Walter Reynolds, of Atlantic City, served as toastmaster. The speakers were Dr. James North (who read an original poem); Dr. W. E. Darnall (who presented a beautiful large loving cup to the guest of honor); Judge A. B. Endicott, Congressman John J. Gardner, Rev. Herbert M. Gesner, D. D., Dr. Theo. Senseman, Dr. Luther M. Halsey, and Prof. H. A. Hare, M. D.

Dr. Reynolds expressed his appreciation of the great honor of being asked to preside; referred to the coming to the then little seaside town twenty-five years ago, of Dr. Edward A. Reiley; of his favorable reception, and his twenty-five years of earnest, faithful work. "We honor him because for a quarter of a century he has led the life of a noble, self-sacrificing physician, upholding always the best traditions of our art. Adhering strictly to the spirit, and even the letter, of the Hippocratic oath, he has given an example which many of us have tried, however unworthily, to follow. We honor him because he never has carried the practices of the market place into the sick room; that he has not bartered for the touch of Midas the heaven sent touch of healing which has been bestowed upon him in such generous measure. He has preserved unsullied the good name which he had from a noble sire. God grant that he may continue for many years to bear his white plume of Navarre, this Chevalier Bayard of Medicine in Atlantic City; this man without fear and without reproach. May he continue to wear the white flower of a blameless life, that he may always have, as he has had, love, honor and obedience, troops of friends."

Dr. W. E. Darnall, of Atlantic City, gave a brief biographical sketch of Dr. Reiley's career. Six of his ancestors were prominent officers in the Continental army, where his father served as a surgeon. He received his education at Rutgers College, New Brunswick, where he afterward became an instructor. Since coming to Atlantic



City he has held several prominent offices, among them, as county physician, president of the Board of Health, a member of the Water Commission, and president of the Board of Education. Dr. Darnall then referred to his ability as a physician and surgeon and also as an expert chemist; also the great esteem in which he is held as a gentleman and a citizen as well as a physician. In concluding his address he presented Dr. Reiley with the beautiful loving cup—the gift of his brother physicians of Atlantic City. Dr. Edward A. Reiley, the guest of honor, received the cup, and responded in substance as follows:

He said that after a man had resided in a community for twenty-five years and made a quarter of a century of mistakes, it was rather an unusual thing for him to receive from members of his own profession such a signal honor as the one now being bestowed upon himself. After signifying his thorough appreciation of this honor, he said: "A greater man than I has recently expressed my thought as I stand here to-night. This great man, when he heard that he was the candidate of a great party for the office of President of the United States, said: 'I can not deny it. I am inexpressibly happy, and words do not find themselves at a time like this.' Gentlemen, all, and friends, all, this is my thought and sentiment also, and I do not believe that I can express my feeling in a better way than to quote these words of William Howard Taft."

The doctor then dropped personal matters and began an outline account of his observations during a residence of a quarter of a century among the professional and business men of Atlantic City. Touching on the progress of medical science among local medical men, he said: "It has seemed to me that every man has resolved himself into a committee of one for internal improvement, and the result has been thoroughly good, and I doubt if there be a town of its size in all these United States that can show as many really good and efficient physicians as can Atlantic City at the present moment."

In addition to medical matters the doctor spoke of the happy and hopeful progress of thought in the directions of law, theology, banking, business, hotels, and last, but by no means least, the ever-increasing and improving facilities for public education. The doctor closed his address with a few sentences of heartfelt thanks for the honor which had been done him and his appreciation of the good will and good fellowship of all concerned.

Judge Allen B. Endicott, Congressman John J. Gardner, Rev. Dr. H. M. Gesner, Prof. H. A. Hare, M. D., Drs. Halsey and Senseman also spoke of Dr. Reiley's worth and good work.

[It was our pleasure to have known Dr. Reiley as a friend and brother practitioner before he went to Atlantic City, as it has been to hear of his success there. We extend our congratulations, wishing him 25 years more of work and rewards. We are pleased to note that the profession in Atlantic City was united in honoring him. May this banquet result in a closer union in good fellowship and work, to the honor of our profession and the good of the citizens of Atlantic City.]

We regret that this matter was not received in time for an earlier issue of the Journal.—Editor.

**The lists of members will be given in supplement to the November Journal. Changes in residence must be received by October 15.**

## Current Medical Literature.

**Sprains of the Ankle.**—A method of treatment strongly advocated in preference to the usual plan of rest and elevation is that of firmly strapping the part and encouraging the patient to go about as usual, at least after the first twenty-four hours. The strapping is applied so as to enclose the whole foot except the heel: it can be kept on until pain and swelling have subsided, after which, as a rule, no further treatment is required.—*The Hospital*.

**The Treatment of Scarlet Fever.**—Oppenheimer says that of his 150 scarlet fever patients he lost only three, and has never observed a case of nephritis. He thinks that the appearance of the latter complication is often due to the use of cold bathing or other extreme hydrotherapeutic measures as well as to the carelessness in the diet of the children. He never uses cold packs or cold baths, making use of compresses in case of headache, unrest, etc. In the diet, meat, meat soups, eggs, and even all dishes prepared with eggs, are excluded; milk, rice, cooked fruit, a small amount of vegetables, and a little bread make up the diet he has found most efficacious. He admits that the freedom from complications and the low mortality of his cases may be accidental, yet as his methods of managing the disease can not do any possible harm he warmly recommends its trial in other hands.—*New York Medical Record*.

**On the Treatment of Tuberculosis of the Bladder by the Method of Roysing.**—Paul Rosenstein, Berlin, in *Berliner Klinische Wochenschrift*, February 3, 1908, first reminds us that tuberculosis of the bladder is almost always a descending infection from the kidney, and that in many instances nephrectomy brings about a cure or at least a great improvement in the vesical lesion. It is only, therefore, for the unimproved cases that this method is applicable. Roysing's method consists in the injection of 50 c.c.m of a 6 per cent. warm freshly prepared carbolic acid solution into the bladder; this solution is kept in for three or four minutes; this is repeated three or four times. If necessary, the treatment is followed by the insertion of a morphin suppository. Roysing reported 18 cases with 13 cures. The author reports two cases, one cured, the other greatly improved. He believes the method to be of great value.

**Suppurative Cholangitis.**—Suppurative cholangitis is indeed a puzzle for the diagnostician if it is not accompanied by jaundice, because there may be no objective symptoms to direct the attention to the gall bladder. In this case the physician seldom suspects the gall bladder and makes a diagnosis of malaria. In cholangitis the temperature rises and falls frequently; the highest temperature is toward evening; the variations in temperature are of great irregularity in their occurrence and the periods of apyrexia are short and not distinct. At times there may be marked subnormal temperature. Chills are frequent, irregular, come on at any time during the day and are unlimited in number. An examination of the blood would clear up the diagnosis of malaria.—H. E. Lomax, in *Albany Medical Annals*.

**Stomach Surgery**—Dr. Ochsner, in *Interstate Medical Journal*, Dec., 1907, takes the moderate middle ground and believes that while many cases of stomach disease are cured by the internist, more have apparent cures and then relapse. He thinks incipient carcinoma is often temporized with until too late for surgical relief. Again through lack of judgment in the selection of cases or through fault of the method of operating, the surgically treated patient may not only fail to get relief, but grow worse. The stomach surgeon, who operates on cases suffering from neurasthenia, locomotor ataxia and hysteria, must injure the cause of surgery. He considers that the following conditions are to be secured by surgical treatment: 1. The closure of the defect following perforative ulcer or gunshot or stab wounds, or rupture of the stomach due to traumatism. 2. The establishment of drainage in cases of obstruction of the pylorus due to neoplasms, cicatricial contraction, the presence of indurated ulcer or hour-glass stomach in the adult, and the presence of congenital stenosis in children. 3. The removal of neoplasms, and possibly, 4. The correction of gastropotosis. He emphasizes the fact that no operation, however perfect, can make an abnormal stomach normal, and hence the patient must have constant dietetic and hygienic post-operative treatment in order to keep well. As to the clinical course of these cases, certain articles of food, especially fruits and acids give the patient gastric distress. Lavage shows the secretion of enormous amounts of mucus for the protection of the stomach. In many cases dilatation begins and progresses, the stomach drags downward. The mucus interferes with digestion, to compensate this, the hydrochloric acid of the gastric juice increases, and if there is an ulcer, causes pain; so a vicious circle is established and grows worse, symptoms of malnutrition appear, toxæmia from the decomposition of residual food, etc.—*Abstract from Interstate Med. Jour.*, December, 1907.—J. E. C. in *West Virginia Med. Jour.*

**Pathology and Etiology of Intussusception from the Study of a Thousand Cases.**—This analysis is made by D. C. Fitzwilliams, who has drawn his material from various hospital reports and journal articles. His definition and description of the condition follow the conventional lines. We can mention only a few of the many points brought out in the interesting paper. The author contends that ileocecal cases are all of enteric origin, and supports his views by the following arguments: 1. The ileocecal valve is the narrowest part of the intestine; it is in consequence the most unlikely spot for the inner to slide through the returning layer. 2. The ileocecal form of intussusception is so common and the ileocolic form comparatively so rare as to make it unlikely that the extreme end of the ileum should in some cases, for reasons unknown, assume a totally different mechanism of the invagination. For be it remembered that according to the accepted view the ileocecal valve is the starting point of both varieties. 3. Owing to the anatomical arrangement of the layers there is no force present which renders it possible for the inner tube to pass through the returning layer. 4. In an ileocolic intussusception there is no way of excluding the possibility of its having started in the lower end of the ileum and passing through the valve by the same mechanism which operates in all other portions of the alimentary canal. 5.

Many instances of enteric intussusception are met which, if growth continued as far as the valve, would be indistinguishable from what is now called ileocolic forms. 6. Many intussusceptions have been reported as ileocolic varieties, although there was an ulcer, a polyp, or even a Meckel's diverticulum at the apex, conditions which are well recognized as being the starting point of intussusceptions in the lower portion of the ileum. 7. Ileocolic intussusceptions can, as I have just demonstrated, be easily explained as having taken place by the ordinary mechanism, if it is only recognized that they are enteric in origin and have not started at the valve. We are, therefore, driven to the conclusion that the so-called ileo-colic form should not be described as a separate variety of intussusception, and this class is accordingly grouped with the enteric cases. Statistics are given as to the point at which the intussusception begins. In the urgency of an operative, and in the limited space of a small incision, determination of this point is often difficult. The spiral twist which is sometimes found in extensive invagination, and which may be occasionally one of the obstacles preventing reduction, is the direct result of the intussusception traveling in a corkscrew-like manner round the rott of the mesentery. Occasionally one may find a retrograde intussusception. In such cases the lower part of the bowel is invaginated into the part above. Such cases are commonly seen in the autopsy room, but are rarely met with during life. It is quite certain, however, that they do form during life, and are capable of giving rise to the same acute symptoms, as does the descending variety.—A. M. A. *Jour.*, March 7, 1907.

**Contribution to the Study of Jejunostomy.**—Delore and Thevenet, Lyons, *Archives Generales de Chirurgie*, March, 1908, come to the following conclusions from an analysis of their own cases and from a consideration of the results of some of the best surgeons; Jejunostomy when performed according to the method of von Eiselsberg and Witzel, must be regarded as an extremely valuable procedure in the conditions summarized under these five headings: (a) In cancer of the esophagus, when the stomach is retracted, and gastrotomy is not feasible. (b) In cancer of the stomach when gastrotomy or gastroenterostomy cannot be performed owing to the extent of the tumor. (c) In gastric fistulæ which cannot be closed by suture. (d) In burns of the stomach by caustics. (e) In ulcers of the stomach which do not heal after gastroenterostomy.

A simple technic should be followed. The authors have found the following plan of procedure most reliable: The stoma ought to be situated at least 30 centimeters below the duodeno-jejunal angle. A soft Nélaton catheter is buried in a gutter in the jejunum, according to the Witzel method, for a distance of 10 centimeters and its tip made to enter the intestine in the direction of the anus. The gut is stitched to the abdominal parietes by a few interrupted sutures, and feeding of fluids by the tube is begun immediately after the operation.—*Amer. Jour. Surgery*.

**An Unusual Paroxysmal Syndrome, Probably Allied to Recurrent Vomiting, with a Study of the Nitrogen Metabolism.**—Drs. Theodore Janeway and H. O. Mosenthal, of New York, at the annual meeting of the Ass'n of American Physicians, presented this communica-



tion. A school girl of sixteen, with no neurotic inheritance, had been subject to recurring attacks of a peculiar nature since infancy. These attacks formerly came every one to four months, but for a year increased to once a week for three months with absolute periodicity. Description of previous attacks tallied absolutely with those observed. The attacks began with epigastric discomfort, increasing to real pain in four to six hours, and severe abdominal pain, with pain in the shoulder, hips, etc., in eight to twelve hours. There was loss of appetite and salivation from the onset. In six to twelve hours the temperature began to rise and pulse became rapid, reaching their maximum in about four hours. As much as 104° and 140 pulse had been noted. Nausea, retching, and usually vomiting once or twice occurred at height of attack. Tongue was thickly coated and breath heavy, but not sweet. Abdomen was rigid and tender, most to right of umbilicus. The whole febrile period was eighteen to twenty-four hours, and, as a rule, in less than thirty-six hours she felt well and ravenously hungry. Marked polynuclear leucocytosis accompanied each paroxysm observed, with subsequent leucopenia for a few days. Weight was rapidly regained after the attack. Saliva was always acid. Vocitus contained abundant free HCl; stomach contents between attacks somewhat excessive HCl. Urine usually showed a trace of acetone, unrelated to the attacks, otherwise nothing. Metabolism study on a prin-free diet showed very little deviation from the normal, but uric acid was markedly decreased and ammonia somewhat increased with two attacks. A further study after a lapse of three months was now under way. Purgation, lavage of stomach, diet, all were without influence on the attacks. There was marked decrease in number and severity after period of observation with use of the alkalies; but renewed severity occurred later. The condition seemed most probably a toxemia allied to the recurrent vomiting of children.—*Medical Record*, Aug. 8, 1908.

An old, narrow Graefe cataract knife is an ideal instrument for opening the drum membrane in otitis. Ethyl chlorid narcosis is the best for this brief operation.—*Amer. Jour. of Surgery*.

## Obituaries.

CLARK.—At New Brunswick, N. J., September 6, Staats Van Deursen Clark, M. D., aged 61. Dr. Staats Van Deursen Clark, of New Brunswick, was born in that city April 3, 1847. His grandparents were George and Ellen (Schuyler) Clark, the former of Scotch descent, the latter of the well known Schuyler family, of Dutch descent. His father, Ira C. Clark, was a prominent business man of New Brunswick; his mother, Joanna Van Deursen was a sister of Dr. William Van Deursen, one of the most prominent and ablest physicians of the city and state. Dr. Clark prepared for college in the Peekskill, N. Y., Military Institute, but his father's death occurring at the completion of his course there, he immediately entered upon the study of medicine in the office of Dr. Henry R. Baldwin, one of the most prominent members of the State Medical Society. He soon after entered the College of Physicians and Surgeons (Columbia), New York City, from which he graduated in 1870. He located that year in Perth Amboy, N. J., where he success-

fully practiced his profession until 1875, when he removed to his native city, New Brunswick. Within a short time he established a large and lucrative practice until about two years before his death, when he was stricken down with locomotor ataxia, which in spite of the efforts of able specialists, was progressive, and resulted in his death September 6, 1908.

Dr. Clark united with the Middlesex County District Medical Society soon after his graduation, served as its vice-president and president, and contributed to its scientific work. He was frequently a delegate to the State Medical Society where for many years he has been enrolled. He served as a member of the staff of the Wells Memorial Hospital, at New Brunswick, since its organization. He was medical examiner for the Junior Order of United American Mechanics. He rendered most efficient service as city physician for seven years, and as a member of the board of health and inspector of health for nine years. Politically he was a Republican and for many years was actively interested in the welfare of that party. He served two terms as a member of the county board of freeholders.

On June 14, 1870, Dr. Clark was united in marriage to Miss Anna M. Tanner, daughter of Frederick Tanner, Esq., and granddaughter of General Morgan. Two children were born to them, Arthur Morgan and Willard P. Clark, both of whom are practicing lawyers in Middlesex County, and one of whom has served as a member of the New Brunswick Board of Aldermen.

The Middlesex County Component Medical Society, at a special meeting held September 10th, unanimously passed the following resolutions:

Whereas, This society has again been called to mourn the loss of one of its respected members, Staats Van Deursen Clark, M. D., of New Brunswick, who after years of protracted illness, died September 6, 1908, therefore

Resolved, That in the death of Dr. Clark this society has lost one of its oldest members—having been elected in 1870—whom we have esteemed for his good qualities as a man, his ability as a physician, his able, laborious and faithful services as city physician for seven years and as health officer for nine years, until disabled by illness, and also as a chosen freeholder of Middlesex county,

Resolved, That although he had not for the past few years been able to meet with us by reason of physical infirmities, we recall not only his past service as president and contributor to the scientific work of our society, and his deep interest in the advancement of the profession at large, but also his devotion and zeal in striving for the betterment of the health conditions of his native city and his fidelity in serving the poor of his city as city physician.

Resolved, That in his professional life we have witnessed the service of one who, through his devotion to his calling, to his city and to humanity, made himself a sacrifice to these arduous duties.

Resolved, That these resolutions be entered on the minutes and that a copy of the same, signed by the president and secretary, be sent to the family of the deceased with the expression of our deepest sympathy; and also that they be published in the New Brunswick city papers.

CUNNINGHAM.—In Vineland, N. J., August 10, William Hicks Cunningham, M. D., died at his home in Vineland, from recto-vesical abscess, af-

ter an illness of six weeks, aged 47. He was a graduate of the Medico-Chirurgical College, Philadelphia, Pa., 1904.

DAVISON.—In Stanhope, N. J., August 18, Calvin Knox Davison, M. D., died at his home in Stanhope, after an invalidism of nearly four years following influenza, aged 61. He graduated from the University of Michigan, Department of Medicine and Surgery, Ann Arbor, 1860. He was an honorary member of the Sussex County Medical Society; also a member of the Medical Society of New Jersey.

(A fuller obituary of Dr. Davison, received too late for this issue, will appear in our next.)

ROSENZOHN.—In East Orange, N. J., August —, William Rosensohn, M. D., died at his home in that city from pulmonary tuberculosis, after an illness of a year and a half, aged 30. He graduated from the College of Physicians and Surgeons, New York City, 1900. He was a member of the American Medical Association, and of the State and Essex County Medical Societies. He was chief of the medical clinic of the Orange Memorial Hospital Dispensary.

WHITE.—At South Amboy, N. J., August 11, 1908, James Leon White, M. D., aged 47 years. He graduated from Jefferson Medical College in 1881, and was for several years a member of the Middlesex County (N. J.) Medical Society. We take the following from a South Amboy newspaper:

Dr. James Leon White, one of the prominent physicians of South Amboy, passed away at the residence of his sister, Mrs. Charles W. Cozzens, yesterday afternoon. Dr. White was 47 years old, and the son of James White, an old resident of the borough. He was born at Bordentown, but spent most of his younger days at South Amboy, having graduated at the public schools of the city under Prof. Corkey, after which he took a post-graduate course.

About 1878 he began the study of medicine under the instruction of Dr. Treganowan, of this city, finally entering Jefferson Medical College, Philadelphia, from which he successfully and honorably graduated in 1881, and commenced the practice of medicine in Halsey Valley, N. Y. From that place he went to Oakdale, Mass., where he continued the practice of his profession for several years, returning to South Amboy in 1891. On account of ill health he did not resume his practice until 1898, which he continued until the commencement of his illness.

Dr. White had spent much of his life in South Amboy and had a wide acquaintance and many friends in this locality, gained not only through his professional skill, but by reason of many pleasing personal characteristics. He served as member of the Board of Health in the city for four years, and for two years was its president. He also served three years as borough physician. His loss will be deeply felt throughout the city, both as a physician and friend.

WHITEHEAD.—At Portland, Maine, suddenly, on August 20, at the age of 36 years, Dr. Rufus B. Whitehead, of Elizabeth, N. J. He was a graduate of the College of Physicians and Surgeons, New York City, in the class of 1893. He was surgeon to the General Hospital of Elizabeth, and for a time served as police commissioner of the city. He was a member of the Union County Medical Society and of the Medical Society of New Jersey.

## Book Reviews.

GENERAL SURGERY.—A Presentation of the Scientific Principles upon which the Practice of Modern Surgery is Based. By Ehrlich Lexer, M. D., Professor of Surgery, University of Königsberg. Edited by Arthur Dean Bevan, M. D., Professor of Surgery, Rush Medical College, Chicago. D. Appleton & Co., New York and London, 1908.

This covers what is generally understood by the Science and Art of Surgery. The busy surgeon finds it difficult to keep abreast with the advances of knowledge in all departments of surgery and this work will concisely point out to him the salient features of recent progress. Especially attractive are the chapters on Infection and Immunity. The abstract of Dr. George Crile's work on direct transfusion of blood brings the work thoroughly up to date in this department. The subjects of opsonins and Wright's vaccination treatment are briefly stated. As a text book this work has a decided value—it is sufficiently comprehensive but not too abstruse. It contains 450 illustrations and is presented in Appleton's uniformly attractive style.

THE BABY—ITS CARE AND DEVELOPMENT. For the Use of Mothers. By Le Grand Kerr, M. D., Professor of Diseases of Children in the Brooklyn Post-Graduate School, etc. A. T. Huntington, Publisher, Brooklyn, N. Y. Price \$1.00.

This is a practical little book, containing much information which the mother ought to have, and of a character that may safely be put in her hands and prove helpful in serving the best interests of the baby and of society. It wisely opens with chapters on "Before the Baby Comes" and "The Nursery," and gives good advice concerning the mother's care of herself, and the preparations for the child's reception; then advises as to the child for the first few weeks, then from month to month until the two years are completed. It very clearly advises against the mother acting as the physician in diagnosing and treating disease. It closes with a chapter on Dietary, a full index, and two pages each for recording the infant's weight and the infant's illnesses from time to time.

## STATE BOARD OF MEDICAL EXAMINERS.

### Report of Examinations for Licenses to Practice Medicine. Examination at Trenton, June 16, 17, 1908.

Written examinations; number examined, 59; number passed, 49; number failed, 10. The following were the successful applicants, names, year of graduation and residence:

Lida Taylor Allen, 1906 Collingwood, N. J.; Clarence V. B. Bumsted, 1907, Red Bank, N. J.; Henry A. Cotton, 1899, Trenton, N. J.; Harry B. Chalfant, 1908, Philadelphia, Pa.; William H. Davis, 1908, Maplewood, N. J.; John A. Derivaux, 1908, Newark, N. J.; Evelyn A. Douredoure, 1905, Longport, N. J.; Edith Earle Eagee, 1908, Lumberton, N. J.; Adolph Flachs, 1907, Bronx, N. Y.; Michael E. Flegherty, 1906, Jersey City, N. J.; Norman L. Garrison, 1908, Paterson, N. J.; John Howard Gould, 1908, Bayonne, N. J.; Samuel Gordon, 1906, Philadelphia, Pa.; Maurice Tracy Hausell, 1908, Bougher, N. J.; Frederick



B. Harding, 1908, Scranton, Pa.; Halver L. Harley, 1908, Hammonton, N. J.; Chas. Frederick Hill, 1908, Newark, N. J.; Ralph King Hollinshead, 1908, Haddonfield, N. J.; Archibald Alex. Howell, 1908, Philadelphia, Pa.; Paul Kahn, 1890, Baltimore, Md.; Kerwin W. Kenard, 1908, Lancaster, Pa.; Lyell Cary Kenney, 1908, Philadelphia, Pa.; Arvilla M. Lang, 1908, Bridgeton, N. J.; Harry Lowenberg, 1901, Atlantic City, N. J.; Laura Barnett McComb, 1908, Haddonfield, N. J.; George Lewis Mack, 1907, Elizabeth, N. J.; Robert Bliss Mackey, 1908, Philadelphia, Pa.; Willard M. Mason, 1907, Atlantic City, N. J.; Charles P. Mayor, 1907, Morristown, N. J.; Clyde K. Miller, 1908, Philadelphia, Pa.; Harry J. Moss, 1906, Philadelphia, Pa.; E. A. Mulford, 1903, Red Hill, Pa.; Harry Jacob Novack, 1906, Philadelphia, Pa.; Archibald E. Olpp, 1908, Bethlehem, Pa.; William A. Pinkerton, 1900, Alberne, Va.; Rankin Reiff, 1907, Holly Beach, N. J.; Laurence H. Rogers, 1908, Trenton, N. J.; William D. Sayre, 1908, Red Bank, N. J.; Frederick Schnell, 1905, Tuscarora, N. Y.; Ferdinand Taylor Stires, 1908, Trenton, N. J.; Richard G. Janison, 1907, Jersey City, N. J.; Wilbur Watts, 1907, Trenton, N. J.; Robert H. C. S. Webb, 1908, New York City; Henry S. Weigle, 1908, Harrisburg, Pa.; Helen E. Weithasse, 1908, Nicetown, Pa.; George H. Wells, 1908, Philadelphia, Pa.; Jay D. Whitham, 1908, Germantown, Pa.; Harry D. Williams, 1908, Lambertville, N. J.; John D. Wilson, 1907, Indiana, Pa.

The following are the medical colleges and the percentages their graduates received on examination:

Baltimore Medical College;  $76\frac{1}{4}\%$ ;  $77\frac{1}{4}\%$ ;  $85\%$ ;  $86\frac{1}{4}\%$ ; Creighton Medical College;  $88\frac{1}{4}\%$ ; Col. lege P. and S., Baltimore;  $81\frac{1}{4}\%$ ; Hahnemann Medical College;  $84\%$ ;  $84\frac{1}{4}\%$ ; Jefferson Medical College;  $75\%$ ;  $75\frac{1}{4}\%$ ;  $76\%$ ;  $78\frac{1}{4}\%$ ;  $80\frac{1}{4}\%$ ;  $80\frac{3}{4}\%$ ;  $85\frac{1}{4}\%$ ;  $86\frac{1}{4}\%$ ; Long Island Col. Hospital;  $80\%$ ;  $83\frac{1}{4}\%$ ; Medico-Chirurgical Col.;  $75\frac{1}{4}\%$ ;  $81\%$ ;  $82\frac{1}{4}\%$ ;  $83\frac{1}{4}\%$ ;  $85\%$ ; University and Bellevue Medical College;  $84\frac{1}{4}\%$ ; University of Maryland;  $80\%$ ;  $85\frac{1}{4}\%$ ; University of Pennsylvania Medical College;  $75\%$ ;  $77\frac{1}{4}\%$ ;  $80\%$ ;  $81\frac{1}{4}\%$ ;  $81\frac{1}{4}\%$ ;  $82\frac{1}{4}\%$ ;  $83\frac{1}{4}\%$ ;  $85\%$ ;  $84\%$ ;  $84\frac{1}{4}\%$ ;  $85\%$ ;  $87\frac{1}{4}\%$ ;  $88\%$ ;  $90\%$ ; University of Virginia;  $80\%$ ;  $82\%$ ; Women's Medical College;  $80\frac{1}{4}\%$ ;  $80\frac{1}{4}\%$ ;  $81\%$ ;  $81\%$ ;  $82\%$ ;  $83\frac{1}{4}\%$ .

But one received an average of over 90—Lyell Carey Kinney, which entitles him to be placed upon the honor roll, and one detected in cheating and was expelled. Nine others failed to pass, not having received the required 75 per cent. graduates from the following:

Albany Medical College, 70-9; Kentucky School of Medicine, 0—expelled; Long Island Medical College, 62-9; Maryland Medical College, 65-8-9; Naples University, 12-9; New York Medical College, 61-2-9; Royal Institute Higher Study, 42-9; Royal University Turin, 415-18; University of Georgia, 721-9; University of Louisville, 71-9.

By direction of the Board Mechano-Therapeutics has been added to the section on Materia Medica and Therapeutics.

The next examinations of the Board, in Medicine, will be

#### October 20-21, State House, Trenton, N. J.

The examinations in midwifery will be October 20th, the examinations in Chiropraxy will be October 20th.

(The above is the substance of the full report

received from Dr. John W. Bennett, Secretary of the Board.—Editor.)

### STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

#### Monthly Statement of Mortality— August, 1908.

During the month ending August 15, 1908, 3,209 deaths were reported to the Bureau of Vital Statistics. The deaths under one year numbered 1,084 over one year and under five years, 274; 60 years and over, 686. The principal cause of death for the month was infantile diarrhoea, and the number of deaths from this cause for the same period for the last three years are as follows:

Infantile diarrhoea, August, 1906.....	639
Infantile diarrhoea, August, 1907.....	689
Infantile diarrhoea, August, 1908.....	727

The prolonged high temperatures of the present summer season, during which time bacterial changes take place in unclean milk, is responsible for a large number of deaths among infants. A marked decrease in infectious diseases is shown during the past month, the number of deaths from certain causes for the last two months, and also the average for the past twelve months, are as follows:

Deaths from—	July	August	Av. for 12 mos.
Measles . . . . .	23	10	14
Scarlet fever . . . . .	48	21	35
Whooping cough . . . . .	21	17	21
Diphtheria . . . . .	41	25	49

The following shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending August 15, 1908, compared with the average for the previous twelve months; the latter are given in parentheses:

Typhoid fever, 20, (37); measles, 10, (14); scarlet fever, 21, (35); whooping cough, 17, (21); diphtheria, 25, (49); malarial fever, 7, (2); tuberculosis of lungs, 270, (297); tuberculosis of other organs, 56, (50); cancer, 132, (124); cerebro-spinal meningitis, 35, (30); diseases of nervous system, 285, (367); diseases of circulatory system, 252, (314); diseases of respiratory system (pneumonia and tuberculosis excepted), 109, (169); pneumonia, 86, (252); infantile diarrhoea, 727, (219); diseases of digestive system (infantile diarrhoea excepted), 249, (196); Bright's disease, 189, (206); suicide, 42, (35); all other diseases or causes of death, 679, (600); total, 3,209, (3,017).

#### Laboratory of Hygiene, Division of Foods and Drugs.—

During the month ending Aug. 31, 1908, 871 samples of food and drugs were examined in the State Laboratory. Of these 68 of the 633 samples of milk were found below the standard. All of the 101 samples of spices but one were found above standard, as were also all samples of chocolate, cornstarch, cream, flour and cream tartar. There were 22 suits for adulterated milk instituted; 101 inspections were made in 74 cities and towns during the month.

**Bacteriological Department.**—Numbers of specimens for bacteriological diagnosis: Suspected cases of diphtheria, 130; tuberculosis, 269; typhoid fever, 350; malaria, 25; miscellaneous, 16; total, 790.

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## ACUTE PERFORATING GASTRIC AND DUODENAL ULCER.\*

Ellsworth Eliot, Jr., M.D., New York  
City.

Surgeon to the Presbyterian and Gouverneur Hospitals.

The clinical features of gastric and duodenal ulcer are so closely allied and the results of their sudden or gradual rupture into the peritoneal cavity, together with the treatment of that unfortunate accident, are so nearly identical, that their simultaneous discussion is quite justifiable. This striking similarity is easily accounted for by the fact that the pylorus and the first part of the duodenum are the most frequent sites of the ulcer and that, at times, the perforation is so close to the junction of these two structures that the ulcer, as observed in the course of the operation, would be referred with equal frequency to either one or the other viscus according to the judgment of each individual operator. Hence statistics dealing with the relative frequency of duodenal and gastric ulcer are necessarily inaccurate.

Perforating ulcer in other parts of the stomach than the pylorus is not infrequent, although an exception, while perforation in the more distant parts of the duodenum are rare. Even in these less common situations, the clinical features of perforation do not merit individual discussion, although it is best to briefly call attention to the following facts: Gastric ulcer is more frequent in women than in men. It is much more frequently associated with an-

emia and is most common between the 20th and 30th year. Duodenal ulcer is more common in men, and it occurs more frequently between the 30th and 40th year in alcoholic subjects, especially in those who indulge in malt liquors. For elaborate details in this connection, the writer refers to the exhaustive analysis of F. Brunner,<sup>7</sup> F. and G. Gross<sup>26</sup> and to Goldstucker<sup>28</sup>.

That no age is exempt from perforation is well demonstrated by the case reported by Cheyene,<sup>26</sup> of a perforating ulcer in a boy of 13; by Martens<sup>43</sup> of a similar condition in a girl of 6; by Patterson<sup>59</sup> of a perforation two inches below the center of the lesser curvature in a boy of 12; by Harnett<sup>29</sup> of a pyloric perforation in a male of 65; by Caird<sup>13</sup> of a perforation near the middle of the lesser curvature in a boy of 12; by the same surgeon<sup>13</sup> of a perforation on the posterior surface of the pylorus in a male of 71; by Bisset of a perforation of the stomach wall in an infant 45 hours old; and by Keen and Musser<sup>28</sup> of a pyloric perforation in a male of 70 which, owing to the patient's advanced age was thought to have been carcinomatous until the contrary was proven by microscopic examination of the excised ulcer. An accurate knowledge of the character and location of the perforation, together with the lesions of the subsequent spreading peritonitis is of the utmost importance in arriving at a prompt diagnosis when the abdominal cavity is opened and serves as a most valuable aid in the selection of the proper plan of treatment.

That no part of the stomach is immune; that owing to the absence of contiguous solid viscera and other means of protection, acute perforation of the anterior wall is more likely to lead into the general peri-

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toneal cavity; that such perforation is more frequent near the pylorus and lesser curvature; that approximately in one-fifth of the cases, acute perforation takes place through the posterior wall of the stomach into the lesser cavity, are all well known facts and established by abundant clinical and pathological evidence.

The size of the perforation varies from an orifice so small as to defy detection to one sufficiently large to admit the tip of the finger, while the shape may be circular, oval or of irregular outline. The edge may be soft or indurated, sharp or ragged on the same plane, or raised above the surrounding surface. The perforation not infrequently is at or near the center of an inflammatory zone of induration so friable as to predispose the cutting out of any suture by which the closure of the perforation is attempted.

Ulcers of the duodenum present similar characteristics. The great majority are situated on the anterior surface of the first part of the duodenum. Exceptionally, the posterior surface is involved. In the second portion perforations are much less frequent. In this situation, those on the anterior surface lead directly into the general peritoneal cavity while perforations on the posterior surface are, for obvious reasons, extraperitoneal. Perforations in the third and remaining portions of the duodenum are exceedingly rare.

That ulcers in the stomach and duodenum are occasionally multiple is well known. F. Brunner<sup>7</sup> estimates that in from one-third to one-quarter of all cases of perforation, other ulcers besides the one in which perforation has taken place, may be found. That perforation *per se*, on the other hand are occasionally multiple, cannot be too strongly emphasized. In this connection it is of interest to briefly note the following instances:

Bell<sup>19</sup> and Currie<sup>20</sup> report, respectively, such multiple perforation near the cardia. Parker reports an instance of two perforations close to one another near the cardia. Faure,<sup>21</sup> Rirriot and Appert mention an instance of two perforations symmetrically placed on the opposed walls of the stomach midway between the pylorus and the cardia, near the lesser curvature. Neither perforation was discovered at the time of operation. Rabagliati<sup>22</sup> reports an instance of multiple perforation of which that on the posterior wall was cleared by suture, while that on the anterior wall was overlooked. Steele<sup>23</sup> reports an instance

of multiple perforation where the one on the posterior wall, a little to the right of that on the anterior wall, but nearly opposite, was overlooked; both perforations being near the cardia. Stelzner<sup>24</sup> reports an instance of multiple perforation, similarly symmetrical, where the perforation on the posterior wall was overlooked. Demons<sup>25</sup> reports an instance of multiple perforation, also symmetrical, where the perforation on the posterior wall, free from induration was overlooked; both perforations were near the cardia. Page<sup>26</sup> reports one large perforation 2 c. m. in diameter on the anterior wall and close to it a smaller perforation not larger than a pin head. Bourlot<sup>27</sup> reports two perforations symmetrically placed on the opposed walls. Vianny<sup>28</sup> reports three perforations near the pylorus adjacent to one another. Korte<sup>27</sup> reports an instance of a perforation on the anterior wall near the lesser curvature, midway between the pylorus and the cardia and on autopsy, fifteen days later, a second perforation was found near the one originally sutured. The same author reports another instance of a perforation the size of a millet seed near the lesser curvature, midway between the pylorus and cardia, and one c. m. to the left of this a second perforation the size of a finger tip. This case recovered, Bretano<sup>11</sup> has collected sixty-six cases of perforating ulcer, in five of which the perforations were multiple, being placed on the anterior and posterior walls respectively. Koerber<sup>34</sup> reports an instance of multiple perforation near the middle of the posterior wall, undiscovered at the time of operation. Analysis of the foregoing cases shows that they may be divided into two groups; those in which several small contiguous perforations occur simultaneously in the same ulcer, and those in which perforations occur simultaneously in more than one ulcer. In this latter group the number of instances in which the ulcers are symmetrically placed on the opposed walls of the stomach and generally near the cardia is astonishing in comparison with the few scattered cases in which both perforations are situated on either the anterior or posterior wall only.

When perforation has taken place, the escape of the gastric contents unimpeded into the peritoneal cavity, results usually in a spreading general peritonitis, which is more symmetrically developed in perforation of the anterior wall of the stomach than in perforation of the anterior wall of the duodenum. In the latter situation, the right

half of the abdomen is at first more extensively involved, the gastric contents passing easily downward along the right lumbar gutter into the pelvis. The gastric contents consist of partially digested food of a peculiarly "sour" quality with frequently an admixture of gas which, for at least twenty-four hours, is generally free from odor and of a quantity so large that its escape through an abdominal incision is accompanied by a distinct "hissing" sound.

The rapidity with which the peritonitis develops varies according to the size of the perforation, the amount and condition of the gastric contents and the ease with which the escaping contents can pass into the more remote parts of the abdomen. Perforation of a very small size occurring in the anterior wall of an empty stomach, with the patient recumbent, would incite a much less virulent and extensive peritonitis than would a perforation sufficiently large to permit of the passage of a large amount of stagnant gastric contents immediately into the pelvis, with the patient in the erect position.

Bacteriological investigations similar to those reported by C. Brunner,<sup>6</sup> show, at times, a considerable variety of streptococci and other pyrogenic organisms in the peritoneal exudate the spread of which and propagation into the more remote parts of the abdomen is largely favored by the peristaltic movement of the abdominal viscera. The escaping contents are also markedly irritating, although in the absence of stagnation, the aseptic gastric juice diminishes somewhat the virulence of the infection. For this reason gastric contents are notably less infectious than duodenal contents, and an early operation in gastric perforation yields better results than is the case with duodenal perforation. In perforation through the wall of either viscus, however, the spread of the peritonitis is so rapid that its extension can be checked and the life of the patient saved in most instances, only by operation within the first twenty-four or thirty-six hours.

In perforation in the posterior wall of the stomach the lesser peritoneal cavity is at first invaded and if obliteration of the foramen of Winslow has taken place, the resulting peritonitis may be limited to that part of the abdomen. In this situation, however, the infection easily extends into the subphrenic space. The lesions which develop later are the direct result of the extension of the peritonitis and include subphrenic abscess, fistulous intravisceral com-

munications, pleurisy, of the serous and purulent varieties, bronchitis, pneumonia, abscess of the lung and pulmonary embolism, ileus, phlebitis, parotitis and other less frequent conditions which require no special consideration.

The fact that acute gastric and especially acute duodenal perforation is frequently mistaken for acute appendicitis warrants a brief statement of the chief gross pathological differences of these two conditions when, under the impression that an acute inflammation of the appendix exists, the right lower quadrant of the abdomen is opened. In both, fluid usually escapes when the peritoneum is divided. In gastric or duodenal perforation, this fluid is yellow, usually free from odor and is distributed uniformly and without change of color, odor or consistency around the cecum and between the intestinal loops that lie in the pelvis. It is usually more abundant as the upper part of the ascending colon is exposed. The change in the appendix is limited to its peritoneal coat which, like the serous investment of the adjacent intestine, may be reddened and injected. In a severe acute appendicitis, on the other hand, the fluid near the parietal peritoneum is usually serous. It is relatively small in quantity and free from odor. As the appendix is approached, however, the fluid rapidly becomes turbid and finally the appendix discolored and friable, is usually found surrounded by thick offensive pus which may be in whole or in part shut off by adhesion from the general peritoneal cavity. In the absence of such characteristic changes both in and around the appendix, the source of an incipient general peritonitis of dubious origin, most probably lies in a perforation of the stomach or duodenum, and the exposure and thorough search of these two structures should follow immediately. A most careful consideration of the clinical features of perforating gastric and duodenal ulcers is justified by the fact that it is only by prompt diagnosis and early operative treatment that the virulent and rapidly spreading peritonitis can be effectively checked. Practically unrecognized until 1880 when Miculicz, as assistant to Billroth, did the first operation, which was repeated by himself and others in scattered instances without success until 1892, when Heussner's patient recovered. In 1893, H. Gifford in England, Michaux in France, and Roux in Lausanne, and in 1894 Atherton in this country, operated successfully. The early failures were due, mostly



to the fact that operation was not done sufficiently prompt, and although earlier recognition and improved operative technic are responsible for the much better results recently achieved, yet, that there is still room for further improvement is shown by the fact that in all lists of published cases many patients, if not actually moribund, were brought to the surgeon's attention too late for operation to prove of value. That such conditions still exist in different parts of the country is clearly shown by the two following communications in response to an inquiry by the writer.

"I regret very much indeed that I cannot, in a succinct way, answer your questions in regard to perforating ulcer of the stomach and duodenum. My experience in this field of surgery has unfortunately been very limited. Our medical men, I am afraid, in this vicinity, have not been sufficiently educated to make the experience of any surgeon in this community very valuable."

Another experienced surgeon writes as follows: "I have records of but seven cases of perforating ulcer of the stomach or duodenum. The condition is rarely recognized by the average practitioner here until too late. All of the seven cases died, four without operation, three with operation. These three had general peritonitis when operated on. In two, the perforation was found, closed and drained. In the third, I didn't have time to look for it, as the patient was in collapse and scarcely survived to get him off the table. That isn't much of an experience."

It is chiefly in the hope of facilitating early diagnosis by those whose experience is necessarily limited in this class that the writer ventures to describe, in what may appear to be needless detail, the clinical features of gastric and duodenal perforation. Of considerable assistance, frequently, is the history of previous gastric ulcer with one or more of its classical symptoms. Yet it is an experience common to all that such a previous history may be entirely absent, the perforation occurring without the slightest premonition. Thus, in sixty-seven cases collected by Haim,<sup>21</sup> in which this point was mentioned, all previous history was lacking in seven. Goldstucker<sup>22</sup> has collected ninety-six cases in which twelve had no previous symptoms of ulcer. Reference is made by the same writer to Englisch's series of thirty-seven, in which no previous history could be obtained in five; of Bretano who states that fifteen of sixty-four, had no previous history; of Moynihan, who

writes that of forty cases,<sup>23</sup> five had no previous history, and of Garre, who estimates that at least 10 per cent of perforations are without previous history.

Such a history, even when present, is usually much less distinct than that which ordinarily occurs in a typical case of gastric ulcer. In fact, in many instances ill-defined pain with obscure dyspeptic symptoms are often misleading in that they suggest a previous chronic cholecystitis, appendicitis or salpingitis, and in fact many such cases are operated on shortly after the acute invasion for supposed appendicitis in which the appendix is found to be normal and further investigation reveals a perforating ulcer. Furthermore, the past history may not only be obscure but it may be of comparatively short duration, a period of several weeks only preceding perforation. Such irregularities in the history as well as the occasional lack of any previous history, account in part for the erroneous diagnosis of appendicitis that is not infrequently made even by the experienced observer, an error which is most important to avoid as in acute perforating ulcer a delay of more than twelve hours in operation places the life of the patient in much greater jeopardy than a delay of equal duration in many cases of acute appendicitis.

The acute invasion of perforation is most always marked by the most excruciating pain, somewhat differently described as knife-like, tearing apart, lancinating, agonizing, etc. It often doubles the patient up and prohibits any effort. The onset of the perforation comes without warning and seems to bear no special relation to eating or drinking; it sometimes follows a blow or other form of sudden or violent exertion, such as lifting or straining; it may occur in the middle of the night and rouse the patient from a sound sleep. The pain is referred to the epigastrium or to the left or right hypochondrium. The latter situation is most common in perforation of the duodenum, the left hypochondrium in perforation at or near the cardia, while the pain in pyloric perforation is usually referred to the epigastric region. Nearly always the pain is referred to some point above the level of the umbilicus. Usually the patient can locate the point or area of maximum pain, although at times it may be so diffuse that it is referred in general and with equal severity to both sides of the abdomen both above and below the level of the navel. The point of maximum pain is subject to many exceptions. Thus

Koerber<sup>34</sup> makes the statement that pain over the spleen and left hypochondrium indicates a perforation through the posterior wall of the stomach into the lesser peritoneal cavity. It is not infrequently and especially in duodenal perforation, referred to some point below and to the right of the navel, thus simulating appendicitis.

This leads to the not infrequent placing of the incision over the appendix in cases of duodenal ulcer, the error being recognized only after the peritoneal cavity has been opened and the appendix found in a normal condition. Of considerable interest was the location of the pain and tenderness in the third case reported by Harnett,<sup>35</sup> in the left hypochondrium left lumbar and right iliac regions, in a perforation through the anterior wall of the stomach. Exceptionally, pain occurs over the sixth, seventh and eighth costal cartilage in perforation near the cardia. Occasionally, the pain is referred to the back, especially to the region of the shoulders and of the vertebral column and sacrum. The pain may even extend down to either lower extremity and so obscure the actual site of the lesion.

The pain, irrespective of its position, is frequently intensified by attempted diaphragmatic breathing or by attempted change in the position of the patient from one side to the other, or later on by flexion of one or both thighs; it may also be increased by leaning forward or by the attempted raising of the shoulders from the bed or by an accidental sneeze or cough. The patient is most comfortable in the dorsal position.

*Vomiting.*—This occurs in at least two-thirds of the cases with, or shortly after the invasion, and is a manifestation of peritoneal irritation. It is not infrequently absent until the onset of the peritonitis, of which it is one of the most constant symptoms. At the onset, it is more common in duodenal than in gastric perforation, probably because of the more highly irritating character of the intestinal contents. It may be repeated and occasionally is persistent. The vomitus consists of the stomach contents and later on bile. Hematemesis is rare. The patient is ordinarily prostrated by the pain. Syncope is the exception. It is more apt to be present in perforations of large size that are necessarily associated with rapid extravasation of the gastric contents into the peritoneal cavity. There may be constipation, but there is rarely any difficulty in the passage of a moderate amount of flatus.

*Physical Examination.*—On inspection, the abdomen is held motionless, the respiration being increased in frequency, shallow and largely thoracic. The epigastric region is at first retracted, the upper anterior abdominal wall being thus placed in close contact with the abdominal contents and thereby delaying the passage of the gastric contents into the more remote parts of the peritoneal cavity. Within the next few hours, certainly within the first twenty-four hours, a variable degree of asymmetrical abdominal distension appears. This is especially marked in the epigastric region and is generally the result of the accumulation of the escaped gas in that part of the abdominal cavity. On palpation, abdominal rigidity is a most constant and important symptom; it is readily detected by making slight pressure against corresponding segments of the two sides of the abdominal wall. To insure accuracy, this symptom should always be elicited during expiration, the patient being supine with the knees flexed on the pelvis. The search for muscular rigidity is not complete without thoroughly testing the resistance of the costal arch. This is also carried out during expiration, corresponding portions of the lateral costal margins being forcibly compressed toward the vertebral column. The determination of the maximum point of muscular rigidity is of as great importance as the detection of muscular rigidity proper, for it serves a most useful guide to the site of the perforation.

In acute perforating duodenal ulcer the resistance is usually most marked in the upper right quadrant and the adjacent part of the right costal arch. In acute perforating pyloric ulcer, the upper portion of both recti muscles, together with the adjacent segments of both the right and left costal arches are symmetrically rigid while in acute perforation near the cardia, the maximum rigidity is found in the upper left rectus and the adjacent left costal arch. Exceptions to this general rule become more frequent with the increase in the length of time that elapses after the perforation has taken place for the reason that the resulting peritonitis may produce a greater degree of rigidity in some distant part of the abdominal wall than in that which overlies the site of perforation. This is especially the case in duodenal perforation where, after twenty-four hours, the rigidity may be most marked in the lower right quadrant, thereby simulating acute appendicitis, and conversely, the writer has



observed instances of general peritonitis from an original gangrenous appendix, in which the rigidity was most pronounced in the upper left quadrant. It is well to emphasize, therefore, that the physical signs here described are those which may be elicited prior to the development of the secondary peritonitis.

*Local Tenderness.*—This is both a subjective and objective symptom. The patient commonly refers the sensation of tenderness to the site of the pain and it is elicited by the surgeon in his search for muscular rigidity. The point of maximum tenderness is a useful, although not quite as reliable a guide, as the point of maximum rigidity to the site of perforation. The sudden withdrawal of pressure is accompanied at times by an exaggeration of the pain, and pressure on a distant point of the abdomen, which is in itself comparatively painless, may on its withdrawal, provoke increased pain in the neighborhood of the perforation.

Palpation through the rectum is of considerable value when the peritonitis has extended into the pelvis in that it elicits tenderness usually to a greater extent on the one side than on the other, the tenderness being referred by the patient to a point on the anterior abdominal wall. Percussion is of value in determining the presence of fluid in either flank. The resulting dullness is more common in duodenal ulcer in the right flank, while in perforation near the cardia, it is more likely to appear in the left flank. The early appearance of this symptom depends upon the amount of fluid in the stomach contents at the time of perforation, although subsequently similar physical signs may be elicited over a secondary peritoneal exudate. The quantity of fluid may at first be so small that dullness can be elicited only with the aid of auscultation. At no time should the test of shifting dullness be made, for not only is the quantity of fluid so small that the percussion note would fail to be affected by a change in the patient's position, but the necessary movement in the patient's body greatly intensifies the pain and favors the rapid spread of the infectious fluid to the more remote parts of the peritoneal cavity.

The disappearance of liver dullness through the interposition of free gas in the peritoneal cavity is a symptom of variable value according to each individual observer. Its absence unquestionably affords no proof whatever against the existence of a perforation, while it may be present under normal

conditions as a result of either an increase in the quantity of gas in the transverse colon or as a result of the interposition of that viscus between the liver and the anterior abdominal wall. It is probably of the greatest value when its development can be observed from hour to hour as the quantity of escaped gas increases. As a general rule this symptom should never in any way be allowed to determine the question of operation. On auscultation, friction sounds due to the rubbing of opposed surfaces covered with fibrinous exudate or splashing sounds due to the admixture of gas and serous exudate are exceptionally elicited. The temperature is moderately increased, but this is in no way a symptom of any value. The character and frequency of the pulse is of far greater value than the degree of temperature, yet owing to its wide variability, it is frequently misleading, being in some instances slow and without change of tension, while in others, especially in those of large perforation, with rapid extravasation of gastric contents, the pulse may be both rapid and weak. In neither event should operation be deferred. Even when the patient is in a condition of shock, a delay in operating until the shock has either decreased or disappeared is positively contra-indicated.

Leucocytosis is a very valuable symptom. Examination of the blood shows ordinarily an increase in the general leucocyte count, while the polymorphonuclear cells are increased. Federman<sup>21</sup> calls attention to the fact that, on the first day in his cases the general leucocyte count varied between 12,000 and 28,000, and that a relatively low leucocyte count with severe local and constitutional symptoms made the prognosis serious. On the second day the prognosis was more favorable in those cases in which the leucocytosis remained relatively high, as in one of his successful cases, in which the leucocytosis was 20,000, while the prognosis was much more serious in those cases in which the leucocytosis decreased below 15,000, the percentage of mortality varying directly with the rapidity of such decreases. In illustration of this principle, Federman cites a case admitted to the hospital on the second day with a leucocytosis of 17,000. Operation was contraindicated on account of the generally bad condition, yet the patient lived for five days, the leucocytosis gradually decreasing until, on the fourth day, it had reached 12,000, where it remained until the death of the patient. Federman mentions

no case in which a differential count was made. The writer suggests the value of a differential count as a means of preventing operation in those cases of hysteria and other non-infectious troubles, which, by their symptoms, simulate acute perforating ulcer. It is interesting in this connection to note the leucocyte count in ordinary ulcer without perforation. Through the kindness of Dr. George Draper, of the House Staff of Presbyterian Hospital, thirty-five cases of simple gastric ulcer were collected from the medical records in which there was an average leucocyte count of about 10,000. One case showed an extreme count of 22,500 with a polymorphonuclear of 84 per cent., while the lowest count was 5,000 in a case that had undergone treatment in the hospital for two weeks.

*Treatment of Perforation.*—Laparotomy is the only rational treatment of acute gastric or acute duodenal perforation. The fact that recovery is possible without operation does not justify conservative measures. Such instances are rare, and the diagnosis, in the lack of operative confirmation, is at least uncertain. Not only is operation imperative but it should be done at the earliest possible moment. The fact that the majority of patients operated on before the twelfth hour recover, while most of those operated on after the twenty-fourth hour of the perforation die, cannot be too strongly emphasized. The severe pain should be alleviated by morphin only after the diagnosis has been made and the necessary treatment definitely determined. Persistent severe pain convinces the patient of the need of operation more quickly than any argument which the surgeon can advance, while its alleviation by morphin is as frequently regarded by the patient as an indication of improvement and the operation is then apt to be deferred too long to be of material value. It is the writer's earnest belief, that in all cases of sudden acute abdominal pain morphin is positively contraindicated and its use should be withheld until the need of surgical attention has been definitely settled.

The operation is best done under general anesthesia, chloroform being preferred. All necessary preparation should be completed before the administration of the anesthetic is begun in order to shorten as far as possible the length of the operation. Preliminary lavage is unnecessary and even the emptying of the stomach by the syphon action of a tube is undesirable as the asso-

ciated gagging is likely to bring about the extravasation of additional stomach contents into the peritoneal cavity.

The incision is made over the site of the supposed perforation; in perforation of the anterior wall of the stomach and pylorus, in the mid-line above the umbilicus, while in duodenal perforation the incision should be either parallel to the outer edge of the right rectus muscle or through the substance of that muscle. In Case III, here reported, excellent exposure of a duodenal perforation was obtained through a mid-incision from the upper extremity of which, a transverse incision to the right was made through the rectus muscle thus conserving its innervation. The advantage of the pararectal incision apart from the excellent exposure which it affords, is the ease with which the abdominal incision can be closed. The incision should be sufficiently long to provide for adequate exposure of the perforation. It should be remembered that, other conditions being equal, the shorter the incision the shorter the operation and the greater the chances of recovery. Ordinarily the necessary steps can be carried out through an incision of not more than four inches in length.

On opening the peritoneal cavity, the escape of gas is frequently noticed together with a variable quantity of yellow tinged fluid with possibly some gastric contents. This field is rapidly sponged away with the least possible disturbance of the abdominal contents which, if held back by suitable pads, permit an excellent exposure of the stomach and the part of the duodenum above the transverse colon. Search is then made for the perforation in the direction from which the largest amount of fluid exudes; the presence of a fibrinous exudate around and about the perforation serving as an additional guide. Prior to the closure of the perforation the stomach and duodenum, if distended, can easily be emptied of their contents by appropriate syphonage or by expression and by that means all unnecessary tension upon subsequent sutures is avoided. The remaining steps comprise: (1) the closure of the perforation; (2) the cleaning of the peritoneal cavity; (3) examination of the posterior wall of the stomach and duodenum for multiple perforations; (4) drainage and closure of the abdominal incision.

(1.) Closure, by some form of suture such as Lembert, mattress, or purse-string applied in such a way as to minimize subsequent constriction of the lumen of the



gut, is accomplished by having the completed suture line at right angles to the long axis of the pylorus or duodenum. This is without doubt the most frequent form of treatment and ordinarily yields satisfactory results. The necessary suture is not always easily applied, however, for either the depth of the perforation, especially when it is at, or near the cardia, or the friability of the adjacent visceral wall may render the insertion of such a suture either impossible or untenable. It is because of this occasional weakness of the sutured perforation that, in order to prevent a recurrence of the perforation or a subsequent fistulous formation, the site of suture is still further strengthened by the superposition of an omental flap. In fact, such a flap has occasionally formed the sole means of closure as in the cases reported by Braun<sup>89</sup> and Gibbon, where the tissue was friable or the perforation relative inaccessible. A similar omental flap has been inserted directly through the perforation like a cork or plug and then held in place by sutures between it and the adjacent surface of the stomach. This method has met with indifferent success, although some recoveries are recorded, and is inferior to other means of closure. The following instances of cases treated in this way are reported as follows: Two cases of recovery by Bennett<sup>90</sup> and by Bonheim,<sup>4</sup> respectively, the latter complicated with hemorrhage pulmonary infarct and by phlebitis of the lower extremity during convalescence. Two fatal cases, one by Koerber,<sup>91</sup> where this method was practiced in a friable perforation in the middle of the anterior wall just below the lesser curvature, in which death occurred thirty-one hours after the operation and an autopsy showed the presence of odorless gas in the peritoneal cavity and the cutting out of the sutures which held the omental plug in place allowing the protrusion through the orifice of a strip of gastric mucous membrane. The other reported by Van Eiselsberg<sup>92</sup> where death occurred twenty hours after the operation, the omental plug, on autopsy, proving gangrenous.

A still more satisfactory means of strengthening the sutured perforation is to cover it with an adjacent viscus. For this purpose the stomach can be infolded upon itself, a method, which if practised at the pylorus, must be conjoined with a posterior gastra-enterostomy to avert almost certain constriction. A more simple procedure

where a simultaneous gastro-enterostomy is unnecessary, is to cover the sutured perforation with the gall-bladder, an operation suggested and successfully practised in a case of large callus, friable pyloric ulcer by Bessel-Hagen<sup>93</sup>. A considerable number of inaccessible perforations or of perforations in the midst of dense adhesions have been successfully treated by simple tampon. Of these F. Brunner has collected a series of fifteen with only three deaths. In a majority of these cases a gastric fistula formed but closed spontaneously and in a comparatively short time. In addition, Koerger reports a case of recovery treated in this way, where the perforation was not found at the time of operation and Wood<sup>94</sup> reports a recovery in a patient where at the time of operation, fifty-two hours after the perforation had taken place, a condition of general peritonitis had already developed. The cases reported by Brunner are those numbered as follows in his table: 185-188 *Lennander*. 543 *Landerer and Glucksmann*. 502 and 503, *Van Beck*. 302-304, *Schlaffer*. 310, *Sherman*. 73, *Capaccini*. 3, *D. P. Allen*. 213, *Maclaure and Dentu*. 562, *Pegram*. 277, *Prichard*. 355, *Villard*. 262, *Parker*.

A certain number of perforations have been treated by gastrostomy. These have usually resulted in the death of the patient. One successful case is reported by Villard<sup>95</sup> in which gastrostomy was done for a perforation the size of a ten-cent piece near the lesser curvature, thirty-four hours after the perforation had taken place. Another successful case is reported by Paul,<sup>96</sup> in which, after closure of a perforation by suture and an omental flap, a second opening was made in the stomach through which a gastrostomy was established. Lorenz<sup>97</sup> reports two cases, where, in the course of an operation for chronic ulcer perforation accidentally occurred. Both were treated successfully by gastrostomy with posterior gastro-enterostomy. F. Brunner has collected 13 additional cases (268, 15, 289, 246, 215, 573, 294, 120, 131, 129, 219, 253, 254), all of which resulted fatally, although many were in such a desperate condition at the time of operation that a favorable result could scarcely have been expected.

The treatment of the perforation by excision of the ulcer and subsequent suture is of value where the ulcer is easily accessible, as in the anterior stomach wall, and when this method can be practised without undue delay and without resultant constriction of the lumen of the gut. The part so removed is limited to the immediate friable and ne-

crotic edges of the ulcer and does not include the entire area of induration, which, were it removed, might easily cause a gap which could not be closed effectively. That such excision affords a permanent cure is believed by none, for it can have no such effect on possible coexisting ulcers that have not undergone perforation, nor can it in any way, by removal of the cause, prevent the formation of subsequent ulcers. That it usually secures firm closure and that at all events it removes a possible source of subsequent cancer are its chief advantages. Among its enthusiastic advocates are Brentano, and Noetzel,<sup>49</sup> who reports fourteen cases treated in this way with six deaths.

The treatment of perforation by pylorotomy or by some form of pyloroplasty has been successfully accomplished. Pylorotomy has been done several times for a supposed malignant growth which subsequent examination proved to be benign. Keetly,<sup>50</sup> reports a case of this character, and Bevan, in a personal communication, speaks of another. Pyloroplasty has been done by Tobin,<sup>51</sup> for a perforation of nineteen hours' standing situated three c. m. anterior to the pylorus, which was the site of previous cicatricial stenosis. The perforation and contiguous pylorus was divided in its long axis and sutured in a line at right angles to that plane. Death occurred five days later from gastric hemorrhage, autopsy showing the line of suture intact. Three other ulcers were also found in the stomach. Miles<sup>52</sup> reports a case of pyloric perforation of twenty-one hours' standing in which closure by suture would have unduly constricted the pylorus, and a gastro-enterostomy was contraindicated on account of the bad condition of the patient. A rapid pyloroplasty was therefore performed by the longitudinal division of the ulcer and perforation with transverse suture. The patient recovered. A similar procedure was attempted by Miles in a perforating duodenal ulcer for the same reasons, in a male of nineteen where the perforation was of fifty-six hours' standing. This patient died.

Some form of pyloroplasty must be done in perforation at the constriction of an hour-glass stomach. Two such cases are reported, one by Maunsell<sup>53</sup> in a perforation of sixteen hours' standing, in which recovery followed a pyloroplasty for a perforation in the narrowed part of an hour-glass stomach, the other by Haim,<sup>54</sup> where an excision of the perforation and the narrowed portion with subsequent suture was practised with a satisfactory result.

After the necessary care of the perforation, that part of the abdominal cavity which has been soiled by gastric contents or which shows the usual indications of an infectious peritonitis, should always be carefully cleansed. Opinions differ according to the extent and the way in which this should be accomplished. While some advocate the cleansing of the entire peritoneal cavity in every case with or without evisceration (the writer is strongly opposed to evisceration), others limit the cleansing to the immediate neighborhood of the perforation. The proper course seems to vary directly according to the degree of diffusion of the gastric contents and the extent of the peritonitis. If the gastric contents are widely scattered and the peritonitis general, the cleansing of the entire peritoneal cavity is clearly indicated; on the other hand, in case of operation a few hours after the acute onset of pain, the cleansing may be limited to the immediate vicinity of the perforation. As to the way in which this shall be accomplished, a more satisfactory cleansing, in the writer's opinion, is obtained by irrigation rather than by dry sponging. If only local cleansing is necessary a small amount of fluid is gently poured into the desired segment of the peritoneal cavity, which is properly protected by pads, and the noxious material is quickly washed away. For purpose of general cleansing, the writer has found a suprapubic opening, which is generally advocated by English surgeons, of the greatest value; it permits thorough cleansing of the pelvis and serves as a ready means of exit or entrance for the irrigating fluid. An original incision extending both above and below the umbilicus, as advocated by some surgeons, would make such a counteropening unnecessary. Theoretically, the cleansing should be conducted in such a way that the soiled contents with the resultant peritoneal exudate should be made to retrace the path which it has followed in spreading to the more remote parts of the peritoneal cavity. On this theory is based the suggestion of Raughton<sup>55</sup> to irrigate through the suprapubic opening upward through the incision over the perforation, but as long as the irrigation is thorough, such special technic seems unnecessary. It is essential, however, to thoroughly clean the subphrenic spaces, for it is in the upper part of the peritoneal cavity that the infection is most virulent, a fact that accounts both for the much more frequent occurrence of post-operative abscess in these spaces as well as



for the more rapid closing of the supra-pubic opening. That a similar post-operative complication, however, may occur in the pelvis is shown by the case reported by Lauenstein,<sup>30</sup> but the diminished virulence of the infection in the lower peritoneum is clearly manifested by the less purulent character of the supra-pubic discharge as well as by the more rapid closing of that orifice. The development of a subphrenic abscess is also materially prevented by placing the patient in the "Fowler" position, for with the upper part of the peritoneal cavity forming the summit and dome of that space, its fluid contents must necessarily gravitate away from the diaphragm.

A rapid search should now be made for a possible second perforation on the posterior wall of the stomach, which is first exposed by an opening through the gastro-hepatic, or the gastro-colic omentum or by an opening through the transverse mesocolon. The best exposure of posterior perforations near the lesser curvature is obtained through an opening in the lesser omentum, while an opening through the transverse mesocolon gives the best access to posterior perforations near the greater curvature. An opening in the gastro-colic omentum, the least vascular of all, does not always provide sufficient room for the closure of a possible posterior perforation, although it is a very satisfactory route for determining the presence and character of an exudate in the lesser peritoneal cavity. The absence of gastric contents and of inflammatory exudate in the lesser cavity makes a perforation in the posterior wall of the stomach unlikely. Should such evidence of perforation be found, however, the writer wishes again to emphasize the frequent symmetry of multiple perforation as a distinct aid to their rapid discovery. The posterior wall should be first subjected to the greatest scrutiny at a point directly opposite the perforation in the anterior wall. The cardia and its immediate neighborhood should then be carefully examined and any additional perforation that may be found in this way properly closed or tamponed.

The question of drainage has also provoked considerable discussion. In case of early operation for perforation, before the advent of peritonitis, the abdominal incision can usually be closed in safety without drainage. After peritonitis has developed, however, and in those cases where the surgeon cannot be certain of the security of the closure of the perforation, drainage by means of cigarette drains inserted to a point

near the closed perforation, and, if necessary, through the suprapubic opening into the pelvis, is preferable. In general, the amount of drainage should be minimized for its excess undoubtedly favors the formation of adhesions which predispose to subsequent ileus.

The value of saline infusion as a post-operative measure can scarcely be overestimated in those cases in which the closure of the perforation is associated with considerable shock or in which this condition has already developed before the operation is attempted. Bonheim (2) has called attention to the advantage of using large amounts of suitable fluid and has achieved remarkable results by the use in some cases of as many as 4000 c.c. in a single infusion. In one of his successful cases of perforation of fifteen hours' standing, in a man of thirty-nine, the patient, almost moribund, received 3000 c.c. of saline infusion prior to the operation, a similar amount on the evening after operation, and the infusions were repeated at intervals so that at the end of four days the patient had received altogether seventeen liters.

(To be Continued.)

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## POLIOMYELITIS ANTERIOR.\*

By David T. Bowden, M. D.

Paterson, N. J.

An acute infectious process, characterized by pyrexia, restlessness, great prostration and by a flaccid paralysis.

That we were visited by an epidemic of this disease during the summer and fall of 1907 there can be no doubt, the writer having seen 75 per cent. more cases than ever before during a like period of time.

Dr. Gibney makes reference to the existence of an epidemic in New York, with a report of cases, vide *Journal American Medical Association*, Dec. 21, 1907. W. L. Griffin in February number *Michigan State Medical Society Journal*, reports an epidemic in Oceana County. Collins and Romeiser report 327 cases from New York and vicinity with analysis of these and 173 other cases. Other epidemics have been recorded from time to time but the time at my disposal will not permit my touching further upon this field.

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\*Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 19, 1908.

## ETIOLOGY

The disease occurs both epidemically and endemically. Many class exposure to heat, sudden chilling of the body, great fatigue and teething as causative agents, but to my mind they are only predisposing and the role played by them is in reducing the resisting powers of the child.

The age of the child plays an important part, the age of greatest susceptibility being between the first and second year. Nine of the cases presented in my series developed the disease in their second year. One case has been reported as developing as early as the twelfth day, by Duchenne, and several adult cases are on record; however, on the whole, it is a disease of early childhood. In Prof. Starr's series 77 per cent. occurred before the fourth year; Dr. Anna Gailbraith's 90 per cent.; Sieligmuller's collection gave 90 per cent. and Gower's 80 per cent. for the first three years of life.

The season of the year also plays an important part, the disease prevailing most during the hot months of summer and early fall, all but four of my cases developing the disease between June and September. In Starr's series of 452 cases, 327 or 72 per cent. during a like period, Galbraith's 70 per cent. in July, August and September. Collins reports 251 out of 327 for the same months.

All writers on this subject admit that an infectious agent is the principal factor in causing the attack; Schultze claiming to have determined the presence of the Jaeger Weichselbaum diplococcus in the cerebro-spinal fluid, others have failed, so that the teaching of the former that the disease under consideration is due to the same cause as epidemic cerebro-spinal meningitis, has not been confirmed. Owing to the similarity of the early symptoms with those of ordinary gastro-enteric infection, I am inclined to believe the cause will be found in the intestinal tract and that the lesions in the nervous system will prove to be due to a secondary toxemia.

The pathology of this disease is so fully described by Harbitz and Sheele in the *Journal of American Medical Association*, issue of October 26, 1907, that I would especially commend it as the most able article I have ever read on the subject. According to these gentlemen the infection is carried by means of the blood current to the pia mater, next the cerebro spinal fluid becomes infected and later by extension along the blood vessels to the gray matter in the cord. The

anterior cornua, owing to being most richly supplied with blood vessels is found to be most extensively involved, especially in the cervical and lumbar segments of the cord. The disease, however, is not confined to these parts alone, the posterior horns, pons, medulla oblongata, cerebellum, and even the hemispheres themselves have shown evidence of cell degeneration.

## SYMPTOMS.

For convenience these are best considered in the successive stages which characterize them. The disease is occasionally ushered in by the sudden appearance of paralysis, e. g., child is placed in bed at night perfectly well and on removal the next morning an inability to stand on the limbs is discovered. These cases in all probability owe the origin of the paralysis to an embolism or thrombosis. Two of the cases in my group were of this type. In others the disease is ushered in by a fever of varying degrees, vomiting, diarrhoea or constipation, convulsions, headache, pains in limbs and joints or all over the body, some being so hypersensitive that no matter what part may be touched evidence of severe pain is elicited. The child may be restless or cry most of the time and evidence of severe cerebral disturbance is present in some cases, headache, drowsiness, and even stupor may be so pronounced as to lead to a diagnosis of meningitis.

Multiple neuritis may be present and cause such marked pain that cases are often diagnosed for rheumatism. Typhoid fever, cerebro-spinal fever and the paralysis following as a muscular weakness are some of the erroneous diagnoses made. One case was referred to me in which a diagnosis of hip joint disease had been made though I cannot understand how such a mistake was made as one is characterized by spasm and rigidity and the other by flaccidity.

The stage of pyrexia usually lasts from one to three days and may reach 101 to 105 degrees Fahrenheit, the paralysis appearing usually within the first twenty-four hours, and within three days from beginning of constitutional disturbance in practically every case. The extent of the paralysis can not be judged by the severity of the initial symptoms, as the most extensive paralysis may follow a mild initial stage. The paralysis is monoplegic in nearly half the cases and more frequent in the lower than in the upper extremity.

The muscles most frequently paralyzed are the anterior lower leg muscles, or dor-



sal flexors of the foot, and of the single muscles the anterior tibial is the one most frequently involved. In the arm the deltoid is most frequently involved when limited to a single muscle. A complete paralysis of the one or both legs may exist but the sartorius generally escapes. The muscles of the trunk are affected only in a very severe type of the disease and paralysis of the sphincters of the bladder and rectum is exceedingly rare.

The disease is next characterized by a period of apyrexia or quiescence of from one to four weeks' duration during which the paresis remains stationary. During this stage, the circulation of the heart being interfered with by the lesion in the cord, a decided reduction in the temperature of the paralyzed limb, as compared with the non-paralyzed member, is detected which may amount to 2 or 3 degrees Fahrenheit, and in extreme cases 10 degrees or more.

Next comes the stage of improvement during which all the muscles except those permanently involved regain their power. Recovery in the affected muscles is indicated by an increased response to stimulation with the interrupted galvanic current, while a diminution of this response and increasing atrophy indicate permanent involvement of the muscles displaying this reaction. All muscles may completely recover during this stage until no vestige of the attack remains, or the paralysis may remain so complete as to make the patient forever bed-ridden or confine him to a life of dependence and a wheel chair.

#### CHRONIC STAGE

During this stage the atrophy increases, contracture and deformity of varying degree appears. The circulation becomes more sluggish, the skin mottled and of a purplish red color, cold and clammy, easily excoriated, and at times localized necrosis occurs.

Deformity is produced by over action of active muscles, gravity and faulty position, and shortening of the member by arrested growth and development. I would here emphasize this fact as a very important element in the production of deformity. I have seen as much as four inches of shortening as a result of infantile paralysis. This being so it can readily be appreciated why in those cases where no history of involvement of the spine or trunk muscles in the early paralysis could be obtained lateral curvature of the spine frequently accompanies infantile paralysis as a secondary deformity. It is important to remember this in considering prognosis.

The ratio of development of the paralyzed limb to its fellows will depend upon the number and importance of the muscles involved.

The localization of the various kinds of deformity following this disease will be taken up under treatment, together with the various methods of preventing them.

#### DIAGNOSIS

During the acute stage and before the development of paralysis the diagnosis is impossible, yet there is no excuse for pronouncing the paralysis as a weakness following meningitis, cold, cerebro-spinal fever, rheumatism or indigestion, and a careful examination of the extremities will reveal a complete loss of power in certain muscles or groups of muscles. The characteristic symptoms upon which one must rely are the sudden appearance of pyrexia, vomiting, constipation, delirium, restlessness and convulsions.

An analysis of the cases reported will show that fever was present in nineteen cases, vomiting complicated nine of these. Two cases developed in the hospital complicating post-surgical state, and two were apparently of sudden onset without premonitory or acute symptoms. Some were complicated with obstinate constipation, some delirious, many if not all were restless in proportion to severity of the pyrexia. The symptoms of this disease being the same in the acute stage as gastro-enteric infection cause little alarm at first and in cases seen six or ten months later it is very difficult to get parents to recall with exactness all the characteristic phases of the beginning of the illness, hence the early history of our cases were in some instances obtained with difficulty, and may not be absolutely accurate. On the whole they are, as many were seen by the writer in private and consultation practice and the others seen by him at the dispensary of the Paterson General Hospital.

After the acute stage the presence of a motor paralysis flaccid in character, without loss of sensation, tending toward gradual recovery, loss of reflexes, with the reaction of degeneration present, constitutes a picture that should be easily recognized. The appearance of the chronic stage, with marked atrophy and deformity, mottled and cold skin, should leave absolutely no excuse for failure in diagnosis.

Perhaps it would be well to refer briefly to the reaction of degeneration, which consists:

- (1) Loss of faradic response.
- (2) Reaction to galvanic stimulation.

Slow and prolonged anodal closure contraction equalling or recurring before cathodal closure contraction.

#### PROGNOSIS

If one finds that the degenerative reaction is becoming more pronounced, i. e. a stronger current is required to produce an anodal closure contraction, the prospect of recovery in the muscle is extremely slight and a very prolonged course of treatment will be necessary to produce practical results.

#### TREATMENT.

This also is to be discussed according to the indications of the different stages. First: during the acute stage depletory agents are indicated, calomel leeches and encouragement of diaphoresis by hot packs, hot drinks and hot blankets, with or without antipyretics.

Second: during the stage of regression. All objects that tend to disturb the tranquility of the patient should be avoided. The nutrition of the muscles is to be considered, limbs enveloped in warm cotton or woollen wraps and as soon as tenderness has subsided, gentle massage, muscle kneading or beating, together with the application of electricity are the chief indications.

Deformity must be carefully watched for and as soon as evidence of its appearance is discovered, some form of mechanical device must be applied to prevent it, passive motion resorted to, and the full range of joint motion should be maintained.

The application of electricity should be carefully carried out. If the paralyzed muscle has so far recovered as to respond to the faradic current then this is to be preferred, if not, then it is useless to apply it and recourse must be had to the interrupted galvanic or combined currents. The negative electrode 4x6 inches should be applied either to the spine or sternum and the positive to the motor point of the nerve supplying the muscle or to the muscle itself, care being taken not to stimulate healthy muscles to contract at the same time.

By far the most important indication in the treatment of this disease is the mechanical or orthopedic treatment. This brings us to the consideration of the last or chronic stage, the stage of deformity or disability. The same mechanical treatment here recommended is applicable in the stage above as a preventive measure. In paralysis of the shoulder muscles the arm should be supported in a sling or preferably a velpeau bandage, to prevent stretching the ligaments, capsule of the joint and weak-

ened or paralyzed muscles, thus preventing dislocation of the humerus.

In forearm paralysis a hand splint should be applied to prevent wrist drop. In paralysis of the trunk some one of the various aluminum, plaster, or silicate corsets, or what I prefer, the Knight corset, should be used. In paralysis of the leg below the knee an ankle support made with the outside upright shorter than the inner one if only the peroneals are involved, or short on the inside if tibialis anticus is alone paralyzed, with what is termed an ordinary catch to prevent toe drop.

In paralysis of the posterior group what is termed a reverse catch should be used instead of an ordinary stop. When the quadriceps is involved, the uprights should extend above the knee, the upper band extending from immediately below the trochanter major and following the gluteal fold to the inner bar, with fixation straps or lacings to prevent flexion of the knee. The same support should be used in paralysis of the hamstring muscles, supplied with a leather backing extending from the calf to the thigh bands. Where the upper thigh and trunk muscles are involved the brace above described with a pelvic band attached is indicated. If both anterior and posterior muscles are paralyzed the uprights should be fixed to the foot plate without a joint at the ankle or what is termed a limited stop joint should be used. In some cases one must design an apparatus to meet special indications but the ones described will suffice to treat practically all the conditions met. Where cases are not seen until after contracture and postural deformity has appeared, then operations upon the shortened structures, as tenotomy, fasciotomy, or myotomy, must be performed and the limb placed within normal lines before a brace is applied.

Much is being done in a curative way by tendon and muscle transplantation or grafting, e. g., in paralysis of the peroneals with good anterior tibial, hallucis and common extensors, the anterior tibial may be split and grafted into the peroneals or the hallucis may be transplanted to the cuboid. The periosteum is separated and the tendon stitched fast to and in contact with the bone, and the distal end of the tendon grafted into the common extensors. I have treated several cases of paralytic club foot in this manner with the result that I have been able to discard the apparatus.

In paralysis of the quadriceps the sartorius may be engrafted and the power of ex-



tension of the knee restored. Paralysis of this muscle alone is very unusual, the other thigh muscles being so extensively involved as to limit the advantages of this operation.

Nerve grafting represents a field of possible future and many reports of good results obtained through use of this method are on record, but fearing I have already overstepped the bonds of prudence in presenting so lengthily a subject, I shall content myself with this reference.

In conclusion I wish to advise with emphasis that no operation of any kind be performed, excepting possibly a tenotomy, until some years after the primary affection—until all possible chance of recovery has passed.

I have a patient under observation at present in whom partial paralysis of the quadriceps with complete involvement of posterior and anterior leg muscles of nine years duration existed, with inability to extend the leg on the thigh when treatment was first instituted who can now, after six months' treatment, accomplish this movement with perfect ease and in the straight line.

No operation should at any time be attempted without a thorough electrical test having been made and a positive destruction of the muscle demonstrated.

#### CASE 1.

Female. One year old at time of initial illness. Developed fever September, 1907, which lasted two days. Vomiting negative. Paralysis confined to both legs, left recovering in about two weeks. At the time I saw the child muscles of the right leg below knee were involved.

#### CASE 2.

Male. Age 26 months. Early history incomplete as child was confined to surgical division of hospital for treatment of ischio-rectal abscess and early development was marked by this complication. From history it began in September. At time of examination one month later there was a loss of faradic response in hallucis, peroneals and common extensors of right leg.

#### CASE 3.

Female. Age 22 months. Fever and vomiting characterized the acute stage which began in September and lasted two days. Paralysis of muscles of neck, back, left arm and both legs. At time of examination both lower extremities affected with loss to faradic stimulation, but response to interrupted galvanic current shows reaction of degeneration.

#### CASE 4.

Female. Age 8 years. Developed paralysis in September. Child retired apparently well, nothing unusual noticed until the next morning when child in getting out of bed fell to floor. Left leg was discovered helpless. In this case a history of exposure was obtained. Examination November 1. Quadriceps and anterior leg muscles paralyzed. Posterior group very considerably weakened. All muscles responded to galvanism, but not to faradism.

#### CASE 5.

Female. Age 3 years and 9 months. Attack ushered in during month of August, with pyrexia, which lasted two days and involved both legs in paralysis. Examination three months later showed more or less complete involvement of left leg and thigh, with right leg partially recovered. No note entered regarding electric response except to galvanism, which is stated as good.

#### CASE 6.

Female. Age 3 years. Began in September, with fever and vomiting of three days' duration, paralysis of right and left legs and left trunk detected. Examination: Left leg and thigh show loss of voluntary motion, loss of faradic response, but responds well to interrupted galvanism.

#### CASE 7.

Male. Age 1 year. Child taken to hospital to be operated on for hernia in early part of September and when removed in October it was discovered he had lost the use of his legs. Examination March 13, 1908, common extensors, dorsal flexors and quadriceps of both legs show absence of voluntary and faradic response. Slight response to interrupted galvanic current.

#### CASE 8.

Female. Age 6 months. Initial symptoms, vomiting and fever. Date of initial symptoms September, 1907. Both legs paralyzed. Examination five months later. Calf muscles of right leg and tibialis anticus on left show complete absence of faradic reaction but respond to galvanism.

#### CASE 9.

Female. Age 9 months. Began September 7, 1907, with vomiting and fever lasting four days. Left leg paralyzed. Examination six months later shows complete loss to faradic stimulation in tibialis anticus and peroneals of left leg, response to interrupted galvanic current good.

#### CASE 10.

Male. Age 26 months. Vomiting and fever ushered in the attack on November

10, 1907. Both legs were paralyzed. Examination five months later. All muscles of left leg and tibialis anticus of right leg show absence of faradic response, but good galvanic.

## CASE 11.

Male. Age 19 months. Initial symptoms began during October, 1907, of two days' duration, followed by loss of power in both legs, child being unable to walk for three months. Examination nine months later. Anterior tibial in both legs paralyzed. No faradic response, galvanic reaction present.

## CASE 12.

Male. Age 21-2 years. Was seized with fever and vomiting during October, 1907, lasting seven days, followed by paralysis of left arm. Examination six months later. All the muscles of left arm and forearm are paralyzed. No voluntary power detected in any of the muscles and reaction of degeneration marked.

## CASE 13.

Female. Age 26 months. Initial symptoms, fever and vomiting, lasting four days, set in during August, 1907, and was followed by loss of power in left leg. Examination eight months later shows a complete paralysis of left thigh and leg.

## CASE 14.

Male. Age 5 years. Primary symptoms began in September, 1907, with high fever. General paralysis followed, lasting eight weeks. Examination December, 1907. Muscles of trunk and abdomen on right side paralyzed and right thigh power much diminished. Child has an abdominal hernia and marked scoliosis. Unable to sit up without support.

## CASE 15.

Female. Age 22 months. Date of attack August, 1907. Child went to bed apparently well. Awoke in the night crying, was very feverish and restless. Next morning it was discovered child could not stand and was unable to walk for three months. Location of paralysis both legs. Examination February 15, 1908. Thigh muscles, quadriceps and anterior tibial muscles of right show absence of voluntary power.

## CASE 16.

Female. Age 21 months. Child put to bed at night well and next day she could not hold anything in right hand and walked lame. Examination three months later revealed partial paralysis of right forearm and thigh.

## CASE 17.

Male. Age 3 years. During October, 1907, child was taken with fever, which lasted two days. Child could not stand or walk for two weeks and then began to do so with assistance and gradually regained power until at the time I saw him, three months later, a slight weakness of thigh and trunk muscles of left side, causing a waddling gait, was the only evidence of his former affection.

## CASE 18.

Male. Age 15 months. On September, 1907, child had a convulsion, but soon recovered. Seven days later he became feverish and was obstinately constipated. Duration of pyrexia three days and child was unable to move for one month. Child seemed most comfortable when lying prone face down and was unable to turn over without assistance. Examination six months later revealed a paralysis of peroneals of both legs, calf groups weakened, as was also the left quadriceps.

## CASE 19.

Female. Age 16 months. Date of attack June, 1907. Had fever for twenty-four hours, after which did not walk well, dragging left limb. Examination six months later revealed paralysis of anterior and posterior tibial.

## CASE 20.

Female. Age 2 years. Was attacked during September, 1907, with fever, which lasted four days. Child could not walk for ten days and then began by dragging the right leg. Examination two months later. The tibialis anticus and posticus, and dorsal flexors are weakened and show diminished faradic response.

## CASE 21.

Male. Age 4 years. August 5th child began complaining of severe pain in head, vomiting, fever and constipation marked. These symptoms lasted about thirty hours. Child could not turn over in bed without assistance and complained of pain in the leg. Walked in a few days with limb and insecure gait. Knee would suddenly bend and throw him. Dorsal flexors and posterior tibial weakened. Child too irritable to make electrical examination and did not return after first visit.

## CASE 22.

Male. Age 3 years. July, 1907, was taken with severe fever, lasting two days, after which child could not stand or walk for two months. Examination eleven months later. Child has full voluntary



power in the left leg. Thigh muscles, quadriceps and anterior tibial of right leg fail to respond to faradism, but react to galvanic current.

## CASE 23.

Age 9 years. Female. In September, 1907, child went to bed apparently well, but became feverish and delirious and next day she could not use her left leg. Examination June 4, 1908. Thigh, quadriceps and calf muscles are all much weakened, but all have voluntary power.

## CASE 24.

Male. Age 12 months. Child suffered for three days with fever, "teething fever," September 6 to 9, 1907. Child had been walking around chairs before attack set in, after which he cried every time he was placed in sitting or standing position for one week. Did not walk for one month. Examination May 28, 1908. All muscles respond to faradism, but with lessened reaction. Posterior and anterior tibials of both feet showing most marked effect of the disease.

## DISCUSSION.

Dr. Henry J. Bogardus, of Jersey City, was to have opened the discussion on this paper, but he was not present, and Dr. F. D. Gray, of Jersey City, was asked to act as a substitute for him. Dr. Gray said that he could only act as a substitute for Dr. Bogardus by reading some material that the latter had mailed to him, which had reached him—Dr. Gray—only after his arrival at Cape May. This he read, as follows:

For a decade prior to the so-called epidemic of 1907, (i. e., from Jan. 1, 1897, to Dec. 31, 1906) there applied for treatment at the Clinic of the New York Orthopaedic Hospital 872 cases of Infantile Paralysis:—

1897 .....	79 cases	1902 .....	110 cases
1898 .....	65 "	1903 .....	108 "
1899 .....	78 "	1904 .....	90 "
1900 .....	56 "	1905 .....	82 "
1901 .....	98 "	1906 .....	106 "

In 1907 there were 215 cases. An annual average of cases treated for the ten years—1897-1906 inclusive—being 87, and for the year 1907 alone 215 cases were recorded.

Thirty-one of these 215 cases came from suburban towns, the balance, or 184 cases, came from the limits of New York City. Although occurring in families represented by a total of 753 children, in no instance did more than one case occur in the same family. Of the 215 cases, 119 were boys and 96 girls.

In nearly every case where the invasion of the disease had occurred during the year, the child was under five years of age, and most frequently in the second year of life. The lower extremities were the parts most commonly affected:—

Right leg, 67; left leg, 60; both legs, 41; right arm, 4; left arm, 3; both arms, 2; one arm and both legs, 7; one arm and one leg, 5; both arms and both legs, 5; back and legs, 5; back and arms, 2; shoulder, 1; back, 1; general, 7.

When one stops to consider that these paralyzed members constitute a permanent disability, requiring almost invariably continuous brace treatment, the importance of an epidemic of this character is better appreciated. It is estimated that nearly one-half of the crippled children wearing braces today must do so because of Infantile Paralysis.

Motor Paralysis, affecting especially the muscles of the lower limbs, interfering with the function of locomotion is a most serious calamity at whatever age it may occur. But Infantile Palsy occurring at the very threshold of life, accompanied by more or less complete loss of muscular control of the legs and arms, followed in a short time by wasting and atrophy of the affected member, defective growth, strong contractions of unopposed healthy muscles, and producing crippling deformities—conditions that are sure to persist with increasing disability, as adult age is reached, and continuing through all the remaining years of the patient's natural existence, is a sequence of events which to the individual afflicted is a most deplorable catastrophe.

Infantile Paralysis, considered in all its relations, is one of the most pathetic, one of the most tragic occurrences in the practice of medicine.

Previous epidemics of this disease have been recorded as occurring in New England towns, but most of the cases with statistics available, have been studied at long range. For the first time in medical history Infantile Paralysis as an epidemic has occurred in and around a large American city. With the patients right at the doors of our Metropolitan hospitals, and under the very eyes of trained scientific observers, it was earnestly hoped that with the laboratory aids of the present day, much would be learned as to the etiology and pathology of this interesting affection. Unfortunately, but little has been actually added to the sum total of our knowledge, and we are still theorizing as to the nature of the infection, and the port of entry into the system.

Dr. D. E. English, Millburn, said that with a good many others, he suspected that anterior poliomyelitis is an infectious disease, although this has not yet been proved to be the case. The few cases that he had seen bore out the hypothesis of Dr. Bowden, that it has some connection with acute or chronic digestive troubles. All the patients with this disease under Dr. English's care had been very much constipated. In one case there was fecal impaction, and he supposed at first that the symptoms were due to the digestive disorders that were present. It took him so long to get the child's intestines cleared out that the paralysis was present before this had been accomplished, thus rendering the diagnosis plain. He extracted from the intestine quite a quantity of chestnut shells, peanut shells and pieces of coal, and he thought it would be interesting to know whether this depraved appetite had any connection with the disease. He also mentioned and he thought that the effect of alcohol on the infantile or childish nervous system might have some bearing upon the case. Exhaustion through over-work or insufficient or improper food, he believed, has something to do with the etiology.

Dr. English then referred to a case that occurred to an adult, a medical student, who was sorely afflicted with "examination fever." He

got three hours' sleep and twenty hours' work in every day for three months, with the result that he was living on coffee, alcohol and tobacco. A few days after his graduation, he was taken with acute anterior poliomyelitis.

Dr. Thomas P. Prout, of Summit, said that he wished to say a word about nerve-grafting in these cases, which had been a subject quite interesting to him. He had had the pleasure of seeing a paper, a short time ago, by Dr. Alfred S. Taylor, who had done a great deal of this work and who had presented his results to the American Orthopedic Association at its recent meeting in Chicago. The paper gave the results of nerve-grafting in half a dozen cases. Judging from these cases and from twenty other examples of nerve-grafting in anterior poliomyelitis reported before the American Orthopedic Association, Dr. Prout said that the results of this procedure were not flattering since the best that could be reported seemed to be simply an improvement in the general nutrition of the limb, which, of course, is worth something. Associated with this improvement, however, there is often an added palsy, for a considerable period, on account of the engrafting of the dead nerve-tissue into the living nerve trunk. This added palsy is often troublesome, and retards to some extent the recovery of these patients.

In regard to treatment, Dr. Prout thought that it was wrong to torture these children with electricity. He had entirely given up this method of treatment, and had seen no reason for regretting that he had done so. In the early stages, he said, these cases certainly partake very largely of a neuritis; and all know the torturing effect of stimulating the surface of the body with electrical currents during the course of a neuritic process. If such treatment is begun early in cases of anterior poliomyelitis, the children are tortured. The method should be abandoned entirely in the beginning, and electrical treatment should not be employed until at least four weeks have elapsed.

So far as etiology was concerned, Dr. Prout felt that probably it would be found that the cases belong to the growing number of latent infectious processes that become active only because of lowered vitality and lowered resistance on the part of the child from various causes, probably gastro-intestinal, as Dr. English had suggested; and that thus afford an opportunity for micro-organisms in the gastro-intestinal tract to make their entrance into the blood-channel.

Dr. Martin J. Synnott, of Montclair, said that he wished to refer briefly to one case that seemed to have some bearing upon the etiology. It was that of a girl fourteen years old, taken very acutely. The symptoms pointed strongly to typhoid infection—so much so that a blood examination was made. To his surprise he found an enormous number of malarial parasites of the aestivo autumnal variety. The paralysis developed on the third day of the fever; and the subsequent course was clear, pointing to poliomyelitis; but whether this was of the classical variety or was another variety of disease simulating poliomyelitis, and caused by the malarial infection, it was impossible to say. The literature of malaria records cases of paralysis of various kinds; but the condition in this case was clearly anterior poliomyelitis. Dr. Synnott wondered whether the malaria parasites could have had any bearing upon the poliomyelitis. He thought that

there might have been a double infection. At any rate, he said, the fever cleared up and the parasites disappeared promptly upon the administration of quinin; and the patient went into a state of chronic paralysis. His experience had been that these cases improve as rapidly under the stimulation of vibratory massage as they do under that of either galvanism or faradism, and with less discomfort to the patient.

Dr. W. M. Leszynsky, of New York, said that the original conception of the disease was based upon isolated cases; but that since the occurrence of various epidemics, the pathology has been materially changed. Anterior poliomyelitis seemed to him a bad name for the cases that occurred during the recent epidemic, because a large number of them did not correspond to the usual type of this disease. He had seen many cases, of which a number showed the characteristics of an encephalitis or a myelitis and, to a slight extent, of a neuritis. He referred to the cases of two children of one family, both of which were supposed to be anterior poliomyelitis, on account of the prevailing character of the epidemic. He saw the patients six weeks after the attack. One of them had a spastic type of paralysis in the left upper extremity and a flaccid attack in the left lower extremity. The other had an effection of the spinal muscles that correspond to pseudohypertrophic paralysis so far as inability to get up from the floor was concerned.

Dr. Leszynsky agreed with Dr. Prout in regard to the treatment, as it seemed to him also inhuman to give electricity in the acute stage of the disease. One should wait until the child shows improvement before instituting such a plan. He considered its use of value, however, several weeks after all acute symptoms had subsided. He did not think it necessary to examine thoroughly by means of galvanism, to determine the presence of the classical reaction of degeneration; for the absence of faradic irritability was indicative of degeneration. He scarcely considered it wise in these cases to wait until deformity has developed before instituting orthopedic measures. When foot-drop is present the foot should immediately be placed in some form of apparatus to prevent the stretching of the anterior group of muscles. This principle should be followed in all muscular paralysis; for muscles, like rubber bands, kept on the stretch, will ultimately lose their contractibility.

Dr. J. Gaunt Edwards, of Williamstown, said that when used at all electricity should be applied in its mildest form. If the muscle should refuse to respond after half a minute, the current should be stopped, as the already weakened muscle has been tired out. He had been much struck with the remark of Dr. English regarding the influence of a depraved appetite in these cases, as only a few months before he had himself had a patient who would eat peanut shells, chalk and coal, and relish them. Needless to remark, he had a good deal of gastric trouble.

Dr. Bowden, closing, said that he had nothing further to say, except to correct a misunderstanding. He had thought that he had indicated in his paper that electricity should not be used until tenderness had subsided. He had included electricity in the same paragraph with massage. He thought that when it can be used without discomfort to the patient, it is the proper method of procedure.



As to the amount of electricity that should be employed, to say from four to eight amperes means nothing; and Dr. Bowden believes that an amount sufficient to produce a contraction should be applied. The idea of the therapeutic effect of electricity, he said, is not that it is curative; it is merely a massage of the muscles. This is why, in recent years, the orthopedic treatment has been recognized as of more importance than the electrical or neurological; it places the child in a position to use any voluntary power that it may have, and increases the blood-supply to the part and its development by exercise. It has been amply proved that as soon as the child is able to carry a supporting apparatus, it should be put on. When there is complete paralysis of both legs, it is Dr. Bowden's rule, as soon as the child can support itself on the limbs, to put a brace on. He then puts crutches under the arms and allows the child to go about with the ordinary swinging motion. The cases that he has had have shown some improvement, and in many it has been very marked, and he thought no one could reasonably question the benefit of electricity. The girl with the paralysis of nine years' standing, when she first came to him had to wear a brace extending up to the thigh; because she had insufficient quadriceps power to extend the leg. After three or four months' electrical treatment she could extend the leg on the thigh. After six months, he was able to cut the apparatus down to the length of an ordinary ankle brace.

#### A RESUME OF MODERN METHODS OF TREATMENT OF POSTERIOR DISPLACEMENTS OF THE UTERUS.\*

By J. Watson Martindale, M. D.,  
Camden, N. J.

A displacement of the uterus may be described as a permanent departure from a normal position. A number of structures more or less yielding and elastic in character serve to hold the organ in position. The upper portions of the broad ligaments at the sides and the round ligaments forward and laterally serve chiefly as stays or guys. Connective tissue in the lower portions of the broad ligaments, together with the utero-sacral ligaments and bladder attachments in front, serve as a kind of sling attached low down on the organ and give support to its weight. The most important supporting structures are the muscles and fascia of the pelvic floor, chiefly the levator ani and the coccygeus muscles, and the internal pelvic fascia with the perineal fascia. The normal uterus is poised in the pelvis, the organs being empty, the cervical portion almost central and as high as the top of the symphysis pubis, the fun-

dus inclined forward almost horizontally, and at times a little to the right or left to accommodate the rectum.

*Causes of Displacement.*—Congenital defects of development result in some changes of position, chiefly backward deviation of the axis or a curving of the axis of the organ forward upon itself. These congenital alterations are usually accompanied by an imperfect development of the ovaries and tubes, as well as the uterus itself, and the individuals so constituted are generally sterile and suffer from dysmenorrhea. Acquired displacements may be due to sudden strains, to the slow action of tumor pressure, of gravity, of intra-abdominal pressure, or of contracting post-inflammatory adhesions, while among contributing causes are laceration of the pelvic floor, subinvolution after labor, passive congestion, general loss of muscular tone, faulty dress, constipation, infrequent emptying of bladder and bowel. I have under observation at the present time a woman who suffers from retroflexion. Before her marriage she was employed in a small dry-goods store. She was the only female employee, and rather than allow the male employees to see her go to the toilet she was in the habit of waiting until she got home before voiding urine. In this way her trouble commenced, and will continue unless she consents to have an operation for the relief of the condition. While speaking of a distended bladder, I have noticed that a patient may present herself for examination with a full bladder. The uterus is backward. The physician makes a diagnosis of retroversion, and at the next visit with an empty bladder he is liable to find the uterus in the normal position and attribute the result to his efforts, while in reality the displacement was due to the distended bladder. I think the proper thing to do is to have the patient catheterized on the table before examination, and in this way we can obviate the difficulty. I saw a patient a short time since in which a diagnosis of an abdominal tumor had been made. She was to have been operated on. The friends of the family wished to have a consultation before operation was decided upon, and this was done. The consultant recognized the condition at once and had the patient catheterized, whereupon the tumor immediately disappeared. I saw a surgeon open up the bladder a short time ago. The nurse in charge had forgotten to catheterize the patient before putting her on the table, and when the surgeon opened the peritoneum

\*Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 19, 1908.

he opened the bladder as well. The bladder was sewed up with a purse string suture, and the patient suffered no inconvenience from the mishap.

Sudden or acute displacements are usually backward and downward. They generally occur in persons who have sustained an over-distension or laceration of the pelvic floor, although there are some cases which have occurred in the virgin as the result of strain. The history of the cases show that in most instances the accident has occurred while doing heavy lifting, and at the same time in a stooping position; for example, lifting a heavy weight off the floor. Sometimes the uterus is caught under the promontory of the sacrum as the result of this accident, and the patient suffers the most excruciating pain until the organ is replaced.

*Gradually Acquired Displacements.*—

These occur generally as the result of lacerations of the pelvic floor. The muscles generally involved are the levator ani and the coccygeus, while at the same time planes of fascia are torn away and separated from their attachments. If the patient gets up too soon after her labor, the uterus and the pelvic tissues all fail to regain their normal tone. The womb is much larger than normal, and when the patient assumes the upright position the increased weight of the organ puts the supporting structures on the stretch, and the uterus begins to descend, first tilting backwards. The vaginal walls being lax and flaccid, roll outwards before the descending bladder and rectum. As time passes along the uterus becomes larger while its supports become weaker, until finally the entire organ comes out and we have the condition known as procidentia uteri. I have never seen this condition in a patient in which the uterus was forward in the normal direction. I think we cannot have a prolapse unless we have backward displacement. The reason of this is as follows: The normal axis of the vagina is upwards and backwards, while that of the uterus is downward and backward, the two organs meeting at an acute angle, and if there were a tendency for an anteverted uterus to come down it would come in contact with the floor of the vagina, which, if it, in turn, were supported by an intact perineum, would make it impossible for the womb to descend.

The contraction from adhesions which result from inflammatory diseases of the pelvic organs is the cause of some of the displacements of the uterus. I have never

seen a case of this description go on to procidentia, as the adhesions which hold the uterus in a faulty position are strong enough to keep the organ from being displaced downwards and thus keep it from descending out of the pelvis.

While most of the cases of retroversion and prolapse are due to the conditions incidental to maternity, it is not always the case. I saw recently a woman of thirty-five, unmarried, and to all appearances a virgin, who has a marked retroflexion, with a cystocele and prolapse. This patient is quite stout, and there is a generally relaxed condition of the perineum, the vagina and the abdominal walls. When the canal of the uterus remains fairly straight and the body of the organ is displaced backwards it is known as a retroversion. If the body is displaced backward, and the uterine canal is bent backward by a curve in the body of the organ we have a retroflexion. It is also possible to have an antiflexed uterus which at the same time is retroverted. Retroflexion and retroversion may be considered together, as clinically their symptomatology and treatment are much the same.

*Symptoms.*—A woman may have a retroverted uterus and present no symptoms whatever. If the organ is not inordinately enlarged it is not at all likely that it will give rise to any symptoms, unless, probably the over-zealous physician draws her attention to the fact. The late Professor Parvin was authority for the statement that a woman was all right so long as she kept her womb in her abdomen, but as soon as she got it into her head she was all wrong. There is no doubt, however, that the great majority of women suffer considerably from a number of different symptoms as a result of retroflexion. They have headache, backache, constipation, hemorrhoids, flatulent dyspepsia, bearing down pains, a sense of fulness in the pelvis, flashes of heat, peculiar nervous disturbances, etc. I saw a woman recently who had been a semi-invalid for ten years. She had been in the hands of a number of practitioners, had had the rest-cure, massage, forced feeding, etc. She suffered from palpitation of the heart, insomnia, hysteria, backache, headache, and the host of ills that go to make up the daily existence of the neurasthenic. The last nine months she had spent in bed. She had a lacerated cervix and perineum, together with a retroversion. She underwent an operation which consisted of a trachelorrhaphy, perinæorrhaphy and an Alexander operation. In three



months' time the patient was doing her own work, and has not had the services of a physician since last fall. Hysteria is an entity, and I believe most cases of this disease are brought about by some continued source of irritation in the body of the sufferer. In this woman's case the heart seemed to bear the brunt of the attack, although the offending organ was in the pelvis. Backache is a most distressing condition, and is generally attributed by the laity and many physicians to disease of the kidneys. Personally, I have seen very few patients presenting kidney lesions who have backache. When a woman presents herself with backache she is probably suffering from lumbago, flatulent dyspepsia or some uterine displacement. Irritable bladder and irregular menstruation are frequent accompaniments of a retrodisplaced uterus.

*Diagnosis.*—The diagnosis is made by bi-manual palpation. If the examiner, with one hand in the vagina and the other on the abdomen, feels the fundus of the uterus between them, the organ is in the normal position, i. e., ante-verted. If he fails to bring the womb between the two hands it is displaced backwards. When the abdominal walls are rigid it may be necessary to give an anesthetic to get sufficient relaxation to make a satisfactory examination. The uterine sound is often used to make a diagnosis of this condition. Dr. Montgomery lays great stress upon the dangers of this procedure, as he believes it is liable to carry infection from the vagina up into the uterus, and unless very carefully handled may perforate the body of the womb. I think the only time it is safe to use the uterine sound is when the patient is to undergo a curettment, and when conditions are such that a section could be performed in case of a perforation. I have seen a uterine dilator go through the fundus in the hands of a man of large experience. I also saw a physician of considerable prominence in this State perforate the uterus with the placental forceps and draw down a loop of intestine in the belief that he had a piece of placental tissue. When these accidents occur in the hands of competent physicians with a blunt instrument, how much more likely are they to occur with a pointed instrument like a uterine sound.

*Replacement.*—Here again the uterine sound has been used very largely. The same arguments used against this instrument for diagnostic purposes hold with regard to its use in replacing the organ. By drawing down the cervix with a tenaculum

and pushing the outside hand deeply into the abdomen, it is generally possible to restore a retroverted, non-adherent uterus to its normal position. I think a uterus which is bound down by adhesions had better be left alone in its faulty position unless you are prepared to do a section. It is quite possible that the hand that breaks up the adhesions will burst a collection of pus, or set up an inflammation that might give rise to serious consequences. My own method of replacing a retroverted uterus is to place the patient in the knee-chest position. By placing two fingers in the vagina and spreading them apart, air is introduced. Here atmospheric pressure, together with gravity, is sufficient to bring the uterus to its normal position, providing there are no adhesions. These adhesions are nature's effort to control inflammation.

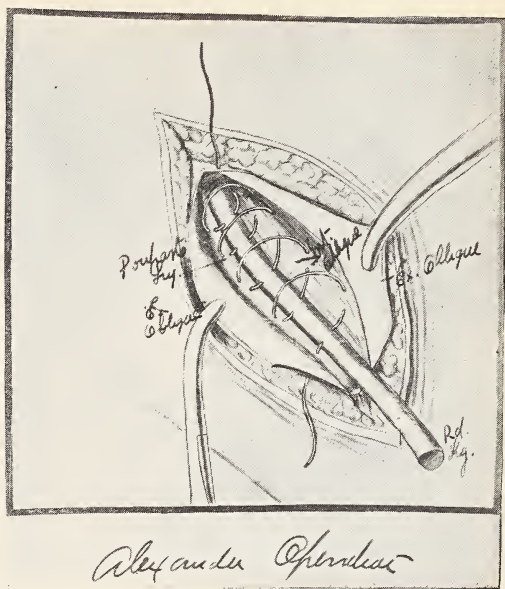
Having replaced the organ, how shall we keep it in its natural position. If the womb is in a state of subinvolution after labor or miscarriage, or if it is enlarged from inflammatory conditions, I have seen a number of cases in which hot douches, tampons and the use of the pessary have given marked relief, and the patient has been cured of her retroversion; but the large majority of the cases we see have a torn cervix, which is the seat of chronic irritation, predisposing the womb to inflammatory conditions and giving rise to circulatory changes which increase the size and weight of the organ. There is in addition, in many cases, a torn perineum, which robs the pelvic structures of their support. In these cases the pessary is manifestly inadequate to cope with the difficulty, as there is no supporting structure for the instrument itself to rest on, and the presence of the pessary pressing against the uterus when it is in an acutely inflamed state only adds to the misery of the poor sufferer.

*Prognosis.*—There is no doubt that many of these cases are cured by operation, yet there are some in which there is a return of the former condition, and in many instances the lost condition of the patient is worse than the first. Take, for instance, a case of procidentia; in this condition it is often necessary to amputate the cervix, do an anterior colporrhaphy and perineorrhaphy before doing anything for the purpose of holding the uterus forward. As soon as it is brought forward intra-abdominal pressure will help to hold it there. The same force which tends to hold a retrodisplaced uterus backward will aid in keeping it forward when the organ is held in its

natural position. In procidentia it is absolutely useless to attempt a cure without repairing the pelvic floor. It is also useless to attempt to cure the condition by doing the necessary plastic work without doing something to bring the uterus over into the normal position. I have in mind two women at the present time. In the first case the uterus was fastened to the abdominal wall by a silkworm gut suture. There had been no preliminary work done on the pelvic floor. The consequence is that the patient still has a rectocele and cystocele. The uterus is forward in place, but the woman has constant pain from the tugging of the sutures. To add to her misery the wound suppurated and there is a large hernia in the site of the incision. I did not see her before her operation, but I don't think she could have been any more miserable than she is at present. The other woman had her pelvic floor repaired, but the uterus was not restored to its normal position. She now wears a large ball pessary, which keeps the uterus from protruding. She is undoubtedly better since her operation, as she would have been unable to use the pessary, because there was no pelvic floor for it to rest on. Had she also been subjected to the abdominal wall fixation that the first woman had she might have been cured; and if the first patient had had appropriate plastic procedures it is more than likely her condition would have been very much better. The prognosis, then, depends largely on the skill of the operator and on the judicious choice of measures adopted for the relief of the condition. The operations hereinafter described are familiar to all of you, but the object of this paper is to point out the advantages and disadvantages of each, and the conditions under which the different operations are indicated.

**Treatment.**—The treatment is primarily, the repair of the pelvic floor, and secondly, an operation which will bring the uterus forward into the position of anteversion.

The first procedure I will mention is the Alexander operation. I have heard men of large experience say that they never use it, because they could not be sure that the appendages were normal, and that practically all gynecologic cases required a section. I have seen a large number of sections in which the pre-operation diagnosis did not correspond with the findings when the abdomen was opened, and I agree with the authority referred to that it is exceedingly hard to positively eliminate disease



Inguinal canal open—showing the round ligament.

of the appendages. The opponents of this operation claim that it is not applicable to cases with adhesions. That is perfectly true. The presence of adhesions is proof of the existence of inflammatory conditions past or present in the uterus or adnexa. Such cases are not suitable for the Alexander operation, and require a section, when the offending structures can be removed, and if necessary the uterus can be brought forward and held there by one of the intra-abdominal operations for shortening the round ligaments or by a fixation or suspension. The Alexander operation is the operation of choice then in case the perineum is intact or has been repaired, where there is no evidence of disease of the uterus or appendages and where the uterus is not excessively large.

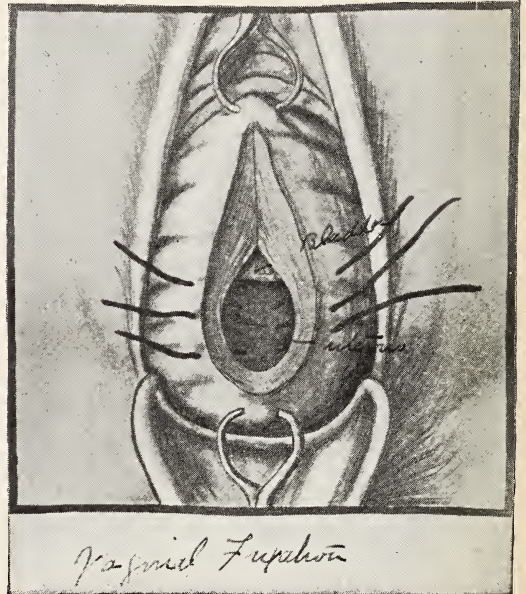
**Technic.**—An incision is made in the groin, starting at the spine of the pubes, and extending outwards along the inner margin of Poupart's ligament for the distance of three inches. This incision includes the skin and fat. All bleeding points must be ligated at once, as the tissues become stained with blood, and it is difficult under these circumstances to recognize the structures. Now the intercolumnar fibres connecting the two pillars of the external ring can be seen. These fibres are divided and we are in the inguinal canal. On the outside is Poupart's ligament and on the inside the internal oblique; these are separated. The first structures we see are the genito-crural and ileo-inguinal nerves. The round ligament generally lies just under the



border of the internal oblique muscle. If it cannot be found there, if we follow up the course of the nerves above mentioned we come to a small mass of fat which covers the opening of the internal ring. This is where the round ligament enters the abdominal cavity. When found it is grasped with a pair of forceps and gentle traction used. By pushing on the surrounding structures with a piece of moist gauze the round ligament is drawn out through the internal ring. In a small proportion of cases the peritoneal cavity is opened in this manoeuvre. If this should be the case it is best to close the rent with a fine catgut suture before going any further. The opposite groin is now treated in the same manner, and when both ligaments are freed traction can be made on them, one in each hand, while an assistant places a hand on the abdomen. When the uterus is well up against the abdominal wall the assistant can feel the fundus under his hand while the operator makes traction on each ligament in turn. When satisfied that the uterus is in the proper position the operator passes his first suture of chromicised catgut through the aponeurosis of the external oblique muscle, then through the internal oblique, the round ligament and the Poupart's ligament. These last three structures are included in successive sutures until the bottom of the inguinal canal is reached, when the redundant portion of the round ligament is cut off. With the same suture the two pillars of the ring are brought together, the overlapping suture being used as in the Bassini operation for hernia. The skin and fat is now brought together and sutured with fine cumol catgut. One objection urged against this operation is the assertion that the ligaments cannot be found. I have had personal observation of forty Alexander operations in the last two years. In all these cases the ligaments were found, with the exception of one. In this case the right ligament was found, and while looking for the left the patient began to exhibit signs of cardiac trouble. Under the circumstances it was deemed advisable to desist. The wounds were closed. The patient made a good recovery, and, strange to relate, the one ligament held the uterus in position, and she was cured of her retroversion with all its accompanying annoyances.

**Results.**—Frederick, of Buffalo, and Simpson, of Pittsburg, have told me personally that they have seen relapses follow the Alexander operation. The only bad re-

sult I have seen was in a case which I operated on last July. In her case both wounds suppurated and the round ligaments sloughed off. Her retroversion was not cured. During March of this year I saw a case operated on for appendicitis. I had performed an Alexander on her a year before. The uterus was found to be in the normal position when the abdomen was opened. I have known of pregnancy to occur in a number of cases after an Alexander operation, in which the labor was perfectly normal, and when the uterus had assumed its natural proportions the organ was in the normal position.



Tension sutures passing through the vagina, then through the cervix.

The next operation to which I wish to call your attention is the vaginal fixation. It is indicated in cases in which there is a cystocele and where the patient is beyond the child-bearing period. In this operation, as in all the others, it is necessary to repair the pelvic floor.

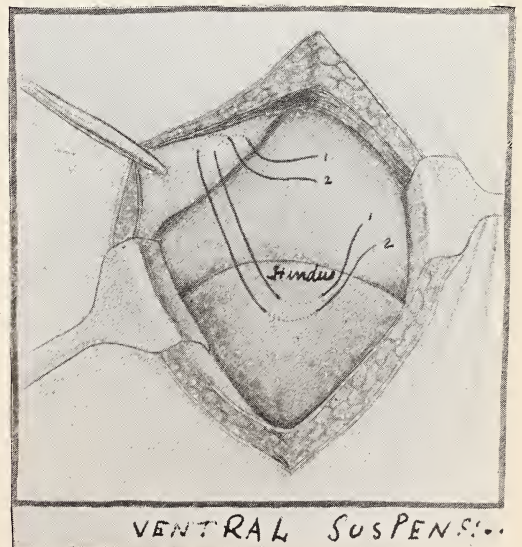
**Technic.**—The anterior lip of the cervix is caught up with a tenaculum. With another tenaculum the vaginal mucous membrane is seized about half an inch below the meatus. This band of tissue is made taut by traction on the two tenacula. With a pair of scissors this structure is cut off. When the edges of the wound retract the bladder is separated from the cervix and underlying vaginal tissues. As soon as the bladder is released from its attachments to the cervix and vagina it is carried upward by its own elasticity. A piece of vaginal tissue is cut off from each side of the in-

cision. The wound is now oval. The cervix is seized with a pair of hemostats and drawn into the wound. This is now held by an assistant. The operator passes a suture through the vaginal wall, then through the uterus, then through the opposite side of the wound. Three sutures are generally sufficient to hold the uterus in position. The operator now starts at the top of the wound with cumol sutures. The suture passes through the vaginal wall, then the under edges of the cut vaginal wall are caught with the needle. A half hitch is used with each stitch. Every second stitch should include connective tissue attached to the bladder, so as to unite the vesical wall and the deepest layer of the vagina, thus preventing the formation of a dead space. When the lower portion of the wound has been reached the suture emerges through the mucous membrane of the vagina. With a continuous stitch the two layers of vaginal mucosa are now brought together, the suture emerging at the upper end of the wound, where it is tied to the free end. Two or three mattress sutures are used to take off the strain of the continuous suture. This description details the technic of vaginal fixation with anterior colporrhaphy. Each case I have seen was the subject of cystocele, and the vaginal fixation was done in the course of an anterior colporrhaphy to cure the cystocele. The results in the cases I have seen have been excellent.

The two operations just described are applicable to cases in which the uterus can be replaced without difficulty, where there is no evidence of disease of the uterus or appendages, and when it is not deemed advisable to open the abdomen. When there is evidence of pelvic disease it is necessary to open the abdomen. We now have the choice of several procedures, the description of which follows.

*Ventral Fixation.*—In a case of procidentia in a woman beyond the child-bearing period this operation is indicated. It is necessary in most cases to do an anterior colporrhaphy amputation of the cervix and a perineorrhaphy. The amputation of the cervix shortens the uterus, makes a cervix which is much thicker than normal, and is thus less likely to protrude from the vagina, and at the same time considerably lessens the weight of the womb, all of which conditions are favorable to the result of the operation. Having attended to the cervix and pelvic floor, an incision is made a little to the right of the median line. The incision passes through the skin and fat.

The aponeurosis of the rectus now appears. This is opened. The rectus muscle is divided with the handle of a scalpel in the direction of the fibres. The peritoneum is now taken up with a pair of thumb forceps. This is incised and the peritoneal cavity is open. The table is placed in the Trendelenburg position, and the intestines are walled off with moist gauze. After examining the tubes and ovaries and breaking up any adhesions that may be present the uterus is brought forward with a tenaculum and held in that position by an assistant. A silk suture is passed through the peritoneum, starting from the inside. This suture then penetrates the muscles and fascia, re-entering the fascia, it passes through the muscle and peritoneum into the abdominal cavity. It then is made to pass through the posterior surface of the uterus, just below the fundus. Emerging from this point it engages the peritoneum of the opposite side, thence through the muscle and fascia. Re-entering the fascia it goes through that structure, thence through the muscle and peritoneum into the peritoneal cavity again. Two such sutures are used. When the two deal of relief to women who suffer from that this procedure is the source of a great prolapse. Last week I saw the abdomen opened for the removal of a fibroid tumor. The patient had had a ventral fixation fifteen years before. The uterus was in the normal position. At that time silk worm-gut sutures were used for the fixation operation. The stitches were found in place. The number of cases of dystocia following this operation led to its abandonment in the

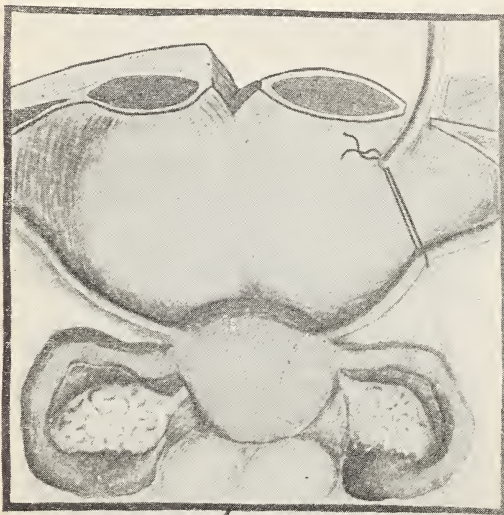


Figures represent sutures through the peritoneum and uterus on one side



case of women during the child-bearing period. In its place has come the operation of ventral suspension.

*Ventral Suspension.*—The steps of this operation are precisely the same as in the fixation, with the exception that the silk suture merely engages the peritoneum, instead of the peritoneum, muscle and fascia. While this operation presents no barrier to successful parturition, it is not by any means as successful as the fixation in its results. I have seen ten cases during the last two years which were subjected to a section after having had the uterus suspended. In most of them the band of peritoneum supporting the uterus had stretched to such an extent that it did not give any support to the uterus. In one case this band was seven inches in length. Another objection to this operation is the fact that it is not anatomical. You have to put a structure there that nature never intended to be there. I refer to the peritoneal band which is formed as the result of the suspension. Nature's method of holding the uterus forward is by the use of the round ligaments, and the two following operations are based on physiological lines,—shortening the round ligaments, so that the structures which were intended by nature to hold the uterus forward can be made to perform their functions.



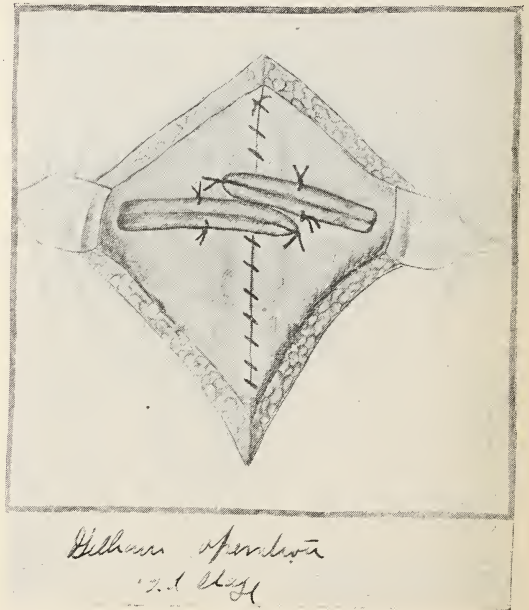
*Gilliam Operation  
1st Stage*

Provisional ligature on round ligament.

*The Gilliam Operation.*—Seeing the difficulties arising from the fixation operation during the child-bearing period, and

the inefficiency of the suspension operation, Dr. Gilliam, of Indianapolis, proposed to shorten the round ligaments through an abdominal incision.

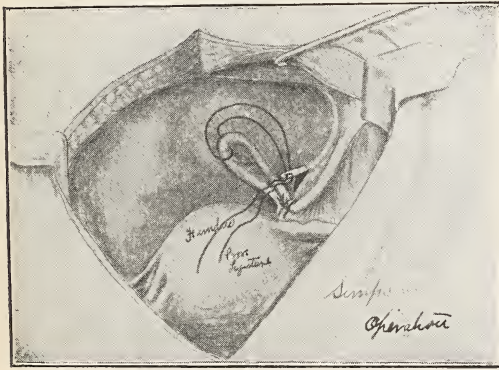
*Technic.*—An incision is made in the median line. After opening the abdomen the round ligament is seized with a pair of forceps. A provisional ligature of silk is carried around it an inch and a half from the uterus. A pair of sharp pointed forceps is plunged through the fascia, muscle and peritoneum in a slanting direction. The provisional ligature is grasped by the forceps and drawn through the peritoneum, muscle and fascia. The ligament of the opposite side is treated in the same manner. The two ligaments are now held with forceps until the abdomen is closed by the usual tier method. The ligaments are sewed on the outside of the fascia. This operation has many advantages. It is probably the easiest of performance of any of the intra-abdominal operations for the relief of retroversion. It also makes use of the best part of the round ligament as a means



Round ligaments sewed to the fascia.

of support. The objection raised to it is that it divides the pelvic inlet into three distinct compartments. This is supposed to invite a probable obstruction of the bowel. In looking into the abdomen after a Gilliam operation you see the pelvis divided into these three compartments. One would think it highly probable that intestinal obstruction might result. Yet I have never heard of such an accident, and this procedure is the operation of choice in Johns

Hopkins', where quite a large number of cases have been treated in this manner. Most operators go straight through the abdominal wall in doing this operation, but Dr. Gilliam adopted the slanting perforation at the suggestion of the late Dr. W. E. B. Davis, of Alabama, who in discussing this operation at the Louisville meeting of the American Association of Obstetricians and Gynecologists, thought it would be a safeguard against hernia. The fact that the round ligament pierces the fascia would seem to me to invite the possibility of hernia in this operation. So far I have not heard of a hernia following its use. I have had personal observation of three cases operated on by this method. The results are excellent and there have been no untoward conditions following.



Simpson Operation—Provisional ligature applied.

The last procedure to which I wish to draw your attention is the retroperitoneal shortening of the round ligaments. Dr. Simpson, of Pittsburg, worked out the plan of shortening the round ligaments retroperitoneally. Various men have modified the technic which he originally used, and the operation hereinafter described is that used by Dr. Chas. P. Noble, surgeon to the Kensington Hospital for Women, Philadelphia. This operation has all the advantages of the preceding ones, and thus far I have not heard any serious objections to its use.

**Technic.**—An incision is made in the median line, and the abdominal cavity is opened in the usual manner. The round ligament is picked up with a pair of hemostats about an inch and a half from the cornu of the uterus and a provisional ligature of silk applied. A small aperture is torn in the broad ligament. The fascia is now separated from the rectus muscle. A

curved aneurism needle is passed under the fascia of the rectus till it reaches the outer border of the muscle. It then dips down into the pelvis, through the internal ring, emerging through the rent in the broad ligament. The provisional ligature is now threaded into the aneurism needle, and the ligature with the round ligament is brought through the muscular tissue. It is then stitched to the under surface of the fascia. The round ligament of the opposite side is treated in the same manner. The peritoneum is brought together with a continuous suture, the muscles sutured with chromicised catgut, and the two edges of the fascia united with an overlapping suture. The skin surfaces are joined with interrupted sutures of catgut. The result is a firm union between the round ligament and the under surface of the fascia, which holds the womb forward in a natural position. The fact that the round ligament does not penetrate the fascia is a point in favor of this operation, as an opening in that structure large enough to allow the round ligature to pass through might justly be considered as favoring the possibility of hernia. The round ligament is drawn out through the internal ring, and the contour of the pelvis is not interfered with as in the Gilliam operation. This operation is quite recent, and I have not had an opportunity of observing its effects upon subsequent labors. I have had personal observation of twenty cases of retroversion treated by this method and the results have been good.

To sum the whole matter up, the treatment would be about as follows: In retroversion following labor or miscarriage tamponage and the pessary are indicated. In retroversion with no adhesions and a moderate sized uterus the Alexander operation would be the proper procedure. In the case of a woman past the menopause where an anterior colporrhaphy is required a vaginal fixation will probably be effective if the uterus is of moderate size. In procidentia uteri beyond the climacteric amputation of the cervix with a central fixation will probably effect a cure. In procidentia during the child-bearing period amputation of the cervix with ventral suspension, taking in a strand or two of the muscle along with the peritoneum will be suitable. In retroversion with a moderate sized uterus and where it is necessary to open the abdomen for inflammatory disease shortening of the round ligaments after the manner described by Gilliam or Simpson will be the operation of choice.



## DISCUSSION.

**Dr. Edward Stechlin, of Newark**—Said that he wished to compliment Dr. Martindale on his excellent and comprehensive paper, and to state that he would subscribe to all the salient points contained therein. The point in the resume that had impressed Dr. Staehlin most was the cause of complete procidentia in the woman beyond the menopause. In such a class of cases, he would recommend a vaginal hysterectomy rather than the method recommended by Dr. Martindale. In connection with the causation of retroflexion, in addition to what the latter had mentioned, Dr. Staehlin said that one may see a class of cases in young chlorotic women, who suffer most terribly, but for whom nothing can be done; so he considers chlorosis an important factor in the production of retroflexion.

In connection with the method of restoration, he thought that the Gilliam operation gives the best satisfaction. This procedure has been variously modified; but Dr. Staehlin considered it so far ahead of anything else that he always employs it. He did not think so much of the Alexander operation as of any of the others mentioned by Dr. Martindale, and wished to know whether in using the Alexander method Dr. Martindale cuts off the round ligament after it is fastened.

Dr. Martindale said that he cuts off the redundant portion.

Dr. Staehlin suggested that it be left, giving as his reason that if, after it has been removed, anything should happen to the ligature, more trouble will be caused than was present in the natural state before operation. Dr. Staehlin then referred to the difficulty in finding an adequate means of restoring the pelvic floor. From the fact that there are so many methods of restoring the perineum, he thought it might be inferred that there are a few of these that are adequate. Most of them are cosmetic procedures; and though they look pretty, they are not good anatomically. He had had occasion a short time before, to go through the Anatomical Department of Cornell University and inspect the dissections, and he felt that, in order to get a correct position of the perineum, one should make an anatomical operation and restore the fibers of the levator ani. He had not, however, realized how diversified these fibers are. They start from the pubis, ramify with fibers of the corresponding side, and encircle the vagina and rectum. If a tear occurs it is usually lateral. A superficial tear down the median line may be easily overcome; but when the tear is lateral and very extensive, particularly if it involves also the triangular ligaments and the levator ani, there is a tendency to procidentia. The rectum recedes and comes out, and so does the vagina. In order to have a successful result, the perineum should be restored in an anatomical way, laying it bare, and being sure to get the fibers of the levator ani, the triangular ligament, and the deep fascia.

In regard to the causation, Dr. Staehlin said that when he was at the maternity hospital it was the practice to keep the patients flat on their backs; and it seemed to him that such treatment would assist in producing a retroflexion. He considered preliminary amputation of the cervix a good point. He thought that the sound had proved to be a pernicious instrument. If a perforation is present, he believes in awaiting developments; as he felt convinced that in any case of rupture of the uterus followed by a small perforation, the wounds have healed spontaneously.

**Dr. Edward J. Ill, of Newark**, said that there was so much to be said and so little time in which to say it that he wished merely to emphasize two or three points. He did not believe that the anatomy of the condition is thoroughly understood or that it has been well studied. In his experience, retroposition of the uterus had produced a large number of pelvic symptoms with a pathological interest. He considered the Alexander operation ideal so far as anatomical condition goes, but thought the Gilliam to be the most practical operation. He had had, he thought, a larger experience with the modified Gilliam operation than any other one man. This modification Dr. Gilliam had himself adopted after having read Dr. Ill's first paper on the subject. Dr. Ill and his associates had done about five hundred of these operations, with less than one and a half per cent. of failures. He thought that no other one operation could show so small a percentage. These failures had occurred in virgins, and he thought that the study of the relation of uterine retroposition to the retroversion had not been carefully studied. The operation, as practiced in these five hundred cases was a modification of the original Gilliam operation. This operation, as it appears in his book, is as follows:

The forceps are carried through to the layer of fascia, muscle, fascia and perineum, and hernia may result. The amount of fat that must be stripped from the anterior wall of the abdomen is so great that suppuration is likely to occur. Gilliam had told Dr. Ill, when he reported his first eighty cases, that he had done twelve only, and was about to give the operation up on account of the large number of suppurative cases that he had had. Dr. Ill's modification consists in making an incision through the middle line, separating the anterior sheath of the rectus, and plunging the forceps down through the center of the rectus. A ligature is tied to the round ligament, and the ligament is drawn through the rectus, and the resulting loop fastened to the posterior surface of the anterior sheath of the rectus muscle. The same procedure is carried out on the other side. It takes only two sutures to get strong adhesions. Dr. Ill had never seen obstruction of the bowels result, as had Dr. Simpson with his operation. The latter, Dr. Ill said, has given this method up and has adopted the operation that the Mayos have been doing. About two years ago Dr. Ill had visited the Mayos and had been invited to see them do this operation. In drawing the ligament through the internal ring, an inch or an inch and a half of peritoneum was drawn in also; and Dr. Ill felt sure that they must have a large number of subfacial hernias among their cases.

Dr. Ill thought that the only possible danger of the operation as he had described it was that the ligament is not pulled out far enough. If the round ligament is pulled out so far as not to have the tube come near the opening of the peritoneum and form an adhesion, there will be no subsequent pain. If there is pain, it is because the tubal adhesions have been formed at the abdominal wall. Dr. Ill had seen no end of labors following this operation and never any trouble resulting. In regard to fixation, he trusted that no one would ever do it, as he had seen more mischief caused by this operation than he could make good in a hundred years. He had had to do four Cæsarean sections to relieve the patients from the consequences of fixation; and he was quite in a quandary what to do until Gilliam had devised the method of which his own is a slight modification.

**Dr. F. D. Gray, Jersey City,** said that he had rather wondered at not hearing some mention of the Webster operation, which had appealed to him as being satisfactory, simple and effective. He did not suppose it was necessary to describe this procedure, which is simply a median section and perforation of the broad ligament just below the tube, picking up the round ligament, drawing it back of the uterus and stitching it to that organ; thus making a sling, holding the uterus in a good normal position, effecting no damage, and doing good work.

He wished to make a plea for more sections in cases of posterior displacements. Within the last month he had operated on four cases in which, while he was not absolutely certain that he could not have reduced the uterine displacement under an anesthetic, he was not able to do it in the knee-chest position during examination, and suspected the presence of one or more elements of pathology that could not be determined without section. In one case he found an imprisoned cystic ovary under a retroflexed uterus; in another, a normal ovary imprisoned under a retroflex uterus. In the other two cases there was plain evidence of a previous appendicitis. He could not have discovered these conditions without having made the section; and without it the patients would have continued to have the effects of a pathology that was hidden and obscure. All made good recoveries. While Dr. Gray had remarked the day before, in discussing another paper, that he did not believe abdominal section to be altogether without danger, he said that comparing the slight danger attached to it with the good of knowing the whole pathology and making a satisfactory support for the uterus, he had come to the conclusion that sections should be done more frequently than they are in these cases.

**Dr. J. M. Rector, Jersey City,** expressed his thanks to Dr. Martindale for his very good theoretical paper. He thought, however, that a good deal is sometimes learned by persons taking opposite sides in a discussion. The author did not seem, Dr. Rector said, to consider that there are other relations causing displacement than simple gravity; and he did not mention that, in order to relieve those conditions in which there is infiltration of the broad ligament, etc., and the uterus is bound down by adhesions, not only posteriorly, but so as to make it practically rigid and not freely movable in the pelvis, something else is necessary. It appeared to Dr. Rector that all these operations mentioned are successful in their proper sphere; that is, when applied to the proper conditions. The reasoning should not be that because there are so many operations, none can be good; but because these operations are not appropriate to the individual cases, they are often unsuccessful. The operations must be fitted to the cases. One should not say, as Dr. Martindale had, that if such a positive indication is present, one must do the Alexander operation; if another, do the Gilliam; and if a third, the vaginal. It is this sort of advice that Dr. Rector considered misleads a great many of the smaller operators and general surgeons. He was of the opinion that the general surgeon is not so well fitted to do gynecological work or intra-pelvis work, from the fact that he does not take into consideration with the same thoroughness as does the gynecologist the outlying conditions in toto of the causes that

bring about the pathological conditions producing the symptoms. Dr. Martindale had not, said Dr. Gray, stated that one must take into consideration the outlying conditions that have brought about the changes that have given rise to the retroverted uterus. If he were to advise looking into these conditions and treating them before operating, Dr. Rector thought the results would be better and the general surgeon would not be complained of by gynecologists.

**Dr. Henry Chavanne, Salem,** remarked that he would like to say a word about a class of practitioners that, when they approach the border of the Promised Land by means of the knife should pray that they know about the land that they are going to enter. It is the duty of the surgeon to be sure that his diagnosis is right, that no error has been made, before he induces a patient to submit to an operation that is decidedly dreaded. He thought that many do not realize how ramifying psycholocially is true practice of medicine, particularly those who limit their practice to medicine; and many have not the full sympathy with the individual suffering with hysteria. He had been forcibly impressed with one statement made by the doctor who had referred to a dilated bladder as the primary cause of displacement of the womb. He was satisfied that the displacement of the uterus is often caused by what might be called the prudery prevalent in American civilization, illustrated by the case of a girl who was the only female attendant in a store. He thought it strange that American women should be afflicted with such false modesty, and considered that its only explanation was to be found in the relation of psychology to the life of the patient. Often, he said, one does not take the time to go deep enough or to question thoroughly concerning the history of the individual. Any medical man who does not take into consideration the history of the patient, her susceptibility, her emotions and her life and occupation, before making a diagnosis is committing an error. One frequently finds people like this girl, who have not the moral courage to place themselves in a position to be reflected upon by those employed with those that lack that peculiar respect for female susceptibility that is found in Southern chivalry. American civilization suffers because of this error that places the delicate and emotional sex in the strenuous code of public schools. He advised medical men to be careful when thinking of the knife and scalpel, to make the diagnosis sure.

**Dr. T. W. Harvey, Orange,** said he had not heard the paper mention the beneficial effect of pregnancy in child-bearing women. He thought that the general practitioner would bear him out in saying that he has often succeeded in curing retrodisplacements of the uterus that have existed some time by advising the proper care of the women after labor. He believed that this procedure would often avoid the use of the knife.

Dr. Ill asked whether Dr. Harvey could give any statistics.

Dr. Harvey said he could give only his own.

Dr. Ill stated that Dr. Mundy had published some statistics in that regard, showing that only three per cent. of such cases got well after pregnancy.

**Dr. Emery Marvel, of Atlantic City,** said that in every retrodisplaced uterus there is a prolapse.



and the fundus is lower than it should be. An operation that will elevate the fundus of the uterus should be done. He admitted having had one accident, the cause of which Dr. Ill had cleared up for him, that of getting necrosis in fastening the round ligament in the Alexander operation. The stump of the ligament was, however, fastened sufficiently to the fascia of the rectus to hold the uterus in position. In ventral suspension, this difficulty is corrected; and the danger of its occurrence is much reduced in Dr. Ill's modification of the Gilliam operation. If adhesions are formed between the anterior surface of the abdomen and the fundus of the uterus, these adhesions cannot, Dr. Marvel thought, be limited. All things being equal, he considered Dr. Ill's modification preferable to the original Gilliam operation. The fact that it elevates the uterus from its displacement makes it the one in which there is the least likelihood of hernia or necrosis.

**Dr. G. W. Drake, of Hollins, Va.,** said that he had risen to emphasize each and every statement made by the author, particularly the statement that hysteria is a real, material pathological entity. Imaginary diseases, he said, are real, material entities with a pathologic basis, and the trouble can often be removed by diverting the patient's attention from the conditions that give rise to the material images in the brain. The assertion that the womb is all right so long as it remains in the pelvis, and all wrong when it gets into the head of the woman, has some significance. It gets into her head in the same sense that the form of a man gets into the head of a woman. We know that a real man is too large to occupy the small space of the cranial cavity or of the brain; but the image of the man, passing through the organs of sight, makes a real, material image in the brain. In that sense the womb sometimes gets into the head of a woman.

The question then arises with the general practitioner, "Why so many operations for procidentia in modern times, and so few in old times? Why so many operations for appendicitis in modern times, and so few in old times?" It is because, said Dr. Drake, the attention is so often called to these particular organs and the prominence given to them by the operations of the surgeon. When the attention is concentrated for any length of time on any particular part of the body, a pathological condition is finally produced in that part. This is illustrated by the familiar experiment in schools of causing children to gaze intently at their finger for a definite length of time, the result being that a tingling sensation is first produced in the finger, then enlargement, and finally pain. If the attention could be turned away from so much pathology and more to physiology, dismissing from the brain all thoughts of disease, Dr. Drake thought that there would be fewer pathological conditions.

**Dr. John P. Reilly, of Elizabeth,** said that the discussion ought not to be closed without a further consideration of the shortening of one or both uterosacral ligaments; and that he would be glad to hear more from Dr. Ill upon this subject, because unmarried patients have persistent dysmenorrhea, and married patients dysmenorrhea with sterility. All the suspensions done to relieve ordinary displacements will not cure this class of cases. All the ligaments on the front may be shortened and the floor repaired, but the case will

not be cured. Dr. Reilly thought it strange that silk had continued to be used so long in these suspensions, as catgut would give rise to much less suppuration and afford all the fixation necessary. It had occurred to him that in the method spoken of by Dr. Ill the posterior parietal peritoneum is lifted from the fascia below more than is necessary, and that this may do harm. He wished to know whether the posterior parietal peritoneum is stripped from the round ligament as it is brought through. He had stripped the peritoneum back so that he had the clear round ligament. By so doing he thought that the pushing upward of the peritoneum can be avoided.

**Dr. Edward J. Ill, of Newark,** said that diseases of the uterosacral ligament had been first mentioned thirty-five years ago by Schultze, in a book on uterine displacements. He referred to the fact that there may be a short, sensitive, uterosacral ligament, but said that he had no suggestion to make as to its treatment. He well recognized the symptoms produced by this condition. About ten years ago, after having studied the matter for a long time, Dr. Ill read a paper at St. Louis on this subject, drawing attention to the condition, and saying that he had something to offer for the correction of the evil. Later, he reported it at the Brooklyn Obstetrical Society's meeting. It appeared that a patient on whom he had operated had been seen by a most prominent surgeon, who wanted to remove her ovaries; and Dr. Ill said that this is the thing most commonly done for a short uterosacral ligament.

The physical examination, he said, is simply that spoken of by Dr. Reilly. The finger is passed into Douglas's cul-de-sac till it strikes the tense cord on one or both sides, which when slightly pressed upon is found to be sensitive. There should be in the pelvis no organ sensitive to slight pressure, though there are organs in this cavity that are sensitive to severe pressure. When the uterosacral ligament is sensitive to slight pressure, it is surely diseased. It may have been very short from childhood, and have produced no symptoms until something happened to render it sensitive. That something is sometimes a fall or a misstep. The disease may have been congenital, the patient having complained from the first day she menstruated. It may have been acquired, being due to some infection of the pelvic cellular tissue, produced, usually, from an affection of the rectum.

The treatment in these cases is quite simple. The condition usually occurs in women that are unmarried. Some of them become absolute invalids, as the result. When the diagnosis has been made and the patient put under ether, a finger is introduced into the vagina behind the uterus. The uterosacral ligament is caught on the end of the finger. The operator then puts his foot on a chair, presses his elbow against his knee, gradually pushing the other hand down into the abdomen until the uterosacral ligament is found between both hands. By massage, the ligament is lengthened, so that it is no longer tense and sensitive. As an additional safeguard against its contracting, it is kept on the stretch for a few days by thoroughly dilating the uterus with a No. 36 steel sound. A No. 34 glass plug should be put in the uterus, and the vagina filled with iodoform gauze. Plain gauze acts as a culture medium and should not be used. The gauze should be allowed to remain there three days. Five yards of gauze, three inches wide, are used.

This is to keep the round ligament on the stretch and to keep the glass plug in the uterus. After the third day the gauze is removed. Occasionally it is found that the uterus has expelled the glass plug. If it has not, the gauze is replaced and allowed to remain three days longer.

Dr. Ill always suggests that for two months following the operations the patients should use douches while on the knees and elbows, so as to keep up a little stretching. Sometimes he has had to do the operation a second time; and once it had to be performed a third time. When the changes in the uterus are not extreme, such as those produced by a chronic displacement, the patient usually gets well. Two of the bad symptoms that the patients have and that guide in the prognosis are sensitive spines and coccygeal pain. In such cases he always make a guarded prognosis. The pain on either side of the back, occipital headache, and inability to walk are overcome by the treatment.

**Dr. Richard C. Norris, Philadelphia**, who was present, was invited to take part in the discussion. He said that he considered himself peculiarly fortunate to be at the meeting when Dr. Martindale's paper was read, as he had been very much interested in the discussion. If he might offer a friendly criticism, he would say that it seemed to him that sufficient stress had not been laid upon the preliminary treatment of the supports of the uterus and of the uterus itself, preceding the operation to correct the displacement. He stated that years ago Emmett had cured a great many cases by means of careful plastic surgery followed by the use of the pessary; and the wider his own experience grew, the more he was inclined to think that many of these operations have a similar temporary effect. They hold the uterus in position for a certain length of time until involution takes place, and, as the result of careful plastic work in the vagina the uterus remains in position; so Dr. Norris thought that especial stress should be laid upon the desirability of careful plastic pelvic surgery prior to any operation to correct the mere displacement.

In regard to the selection of the operation for this purpose, he was glad to find that the consensus of opinion in the New Jersey Medical Society was that which is gradually spreading throughout the country,—that the round ligament is the essential factor to be used, and that the portion which is the thickest and the nearest to the cornu of the uterus is the one best fitted to accomplish the work. He was glad to hear most of those discussing the question say that ventral suspension or fixation must be discarded. This method had been popularized through the work of Dr. Howard A. Kelly and his assistants, and Dr. Norris said that it is an interesting fact that he had been told that in the Johns Hopkins Hospital the method has been abandoned. At the Preston Retreat, of which Dr. Norris has charge, there have been during the last fifteen years 3,000 confinement cases, the patients coming from all districts of Philadelphia, the city in which modern gynecology had its birth. In the cases in which ventral fixation had been used, he had repeatedly had complications in childbirth that led him to believe that this operation should be abandoned. Even the technique that prepares for a suspension may eventuate as a fixation; and Dr. Norris thought that all should agree that this operation has had its day, which

is past and gone forever, for women of the child-bearing age.

When one comes to consider the operation that is to hold the uterus forward, Dr. Norris said that the strongest part of the round ligament is the portion most surgeons are utilizing. It may be used in various ways; but his vision sees the day when any operation that hangs the uterus from the abdominal wall also will have passed away. He believes that someone will devise an operation by means of the round ligaments that will not fasten the uterus to the abdominal wall. In regard to the danger of hernia and sloughing in Gilliam's operation, which he had done repeatedly, Dr. Norris stated that he had had no such results with either it or the Simpson operation. He had used the procedure suggested by Dr. Ill, which appealed to him surgically and clinically as being the most satisfactory. He was surprised that the gentlemen had failed to appreciate the Alexander operation; because he believed that there existed a class of uterine displacements in child-bearing and especially in unmarried women in which this operation finds a wide field of usefulness. When performed with careful technique, there is in the Alexander operation no danger of sloughing, infection or hernia.

Dr. Norris expressed his thanks for the honor of addressing the Society, and asked them not to forget the early teaching of the masters of gynecology and still to remember the principles and practice devised by Emmett for the repair of lacerations of the cervix and the pelvic floor, because the skillful repair of these lacerations is a contributing factor to the permanent success of any and all of the operations for displacement, that should not be forgotten.

**Dr. Martindale**, closing, said he was much pleased to have heard so much discussion on his paper, and stated that he would take up the remarks of the various gentlemen separately.

Dr. Staehlin had said that in cases of procidentia uteri he would do a vaginal hysterectomy. Dr. Martindale said that if a vaginal hysterectomy is done in such cases, the condition will not be cured. He stated that it is absolutely necessary to do the plastic work before any of the operations described are attempted.

Dr. Ill, upon request of Dr. Reilly, had described a method of treatment by massage, for a tender and shortened uterosacral ligament. Dr. Martindale said that he would be very wary about employing treatment of this character; unless the operator is very skillful he might mistake some other structure for the uterosacral ligament; and by the massage damage might be produced.

Dr. Gray had spoken of the Webster operation. Dr. Martindale was not familiar with this method, and consequently could not speak about it.

Dr. Rector had referred to retroflexion with chronic metritis and salpingitis, with adhesions. Dr. Martindale thought that in a case of that kind the proper treatment would be supravaginal hysterectomy-salpingo-oophorectomy which is the better procedure, with regard to mortality and subsequent morbidity than is a double salpingo-oophorectomy. Experience proves that patients make a better recovery when a hysterectomy is performed than when the tubes and ovaries only are removed and the uterus allowed to remain.

Dr. Harvey had made the suggestion that subsequent pregnancy has a good effect upon backward displacement of the uterus. Dr. Martindale had seen this exemplified, but said that one can-



not always get the ladies to take up with his ideas in this respect. He had suggested, but had not found his advice taken.

Dr. Marvel had spoken of ventral suspension. One of the disadvantages of this operation, said Dr. Martindale, is the use of silk sutures; as the presence of any unabsorbable suture-material in the abdomen is objectionable. Again, some operators will not trust an absorbable suture material. He had been talking to Dr. Cullen, of Baltimore, who had said that he would never trust catgut in the abdominal cavity, as it was absorbed too soon and was thus liable to permit fatal hemorrhage.

Dr. Martindale had seen a great many sections; and in the clinic of which he is a member, the suture-material universally employed is catgut. He said that he should think the danger from the premature absorption of catgut would be less than that from the presence of a foreign body like silk in the abdominal cavity. In many cases the silk ligatures become infected and cause suppuration.

Dr. Drake, of Tennessee, had said that years ago women did not have procidentia. Dr. Martindale, however, had seen a woman of eighty-five, fifteen years ago, with a complete procidentia. He thought that it was probable at that time the patients did not consult physicians for this trouble, and that if they did they would not have got relief from it.

Dr. Reilly had spoken of shortening of the uterosacral ligaments. Dr. Martindale had never done this, but had seen it done in three cases in the course of the operation for procidentia uteri.

Dr. Norris had referred to the plastic work about which Dr. Martindale had spoken in his introduction. All these operations, he said, must be preceded by appropriate plastic work.

Dr. Martindale wished to take exception to the attitude of Dr. Ill and others in regard to ventral fixation. He believed that in women beyond the climacteric it is the operation par excellence. He had seen a number of patients cured by this operation, performed according to the technic described. They were relieved of their discomfort and enjoyed good health for years afterward. To do a ventral fixation on a woman during the child-bearing period, however, he considered criminal.

The suspension operation, taking in one or two strands of the muscle, he thought would probably be more effective than the ordinary suspension, merely using the peritoneum, and would probably not be productive of serious difficulty in subsequent pregnancies. He believed that the large uterus, with lax vaginal and abdominal walls, and with cystocele and rectocele, better support is afforded by ventral suspension than by any of the other operations mentioned. It would be his operation of choice, providing he had a case of the character described.

A persistent sinus after an operation for appendicitis in the majority of cases means that a portion of the appendix has been left behind. It may also mean that an exudate has not broken down or that some foreign body has been left in the wound. One should give the sinus an opportunity to close by itself, but if it does not do so, a prolonged operation is necessary. The walls of the sinus must be carefully excised, all rents in the serosa of the intestine sewed over and drainage instituted, as there is often considerable oozing from raw surfaces. First and foremost, the primary cause of the sinus must be found and corrected.—*Amer. Jour. of Surgery.*

## ANNUAL BANQUET.

Medical Society of New Jersey.

Hotel Cape May, June 19, 1908.

Address of President E. J. Ill, M. D.,  
Toastmaster.

Ladies, Gentlemen and Fellow Members—The committee on arrangements has decided that I should act as toastmaster, of this our Annual Banquet. The committee might have chosen a better speaker. It has asked me to blow our own horn vigorously, as if doctors ever did anything else. There is no profession that can beat us at that. And why should we not speak of ourselves? Are we not as old as the human race itself. Eve dosed Adam so that he would act more understandingly. She started that pathy, which her daughters have followed ever since. Adam has always been known to take his dose with resignation.

But I have not been asked to speak of the origin of medicine. If it were so I should take you back to the days of the Babylonians 4,500 years ago, and the Assyrians and the Chaldeans and especially to the Egyptians, who were the specialists without limit. Compared with the Egyptians we are the real Kindergarten of Specialists. In Egypt there were no general practitioners to be referred to by the readers of surgical papers.

It will be my province to give you some idea of the history of Medicine in New Jersey. The very early history of medicine in New Jersey, differed much from present day doings. There were few real doctors and many irregular ones. The clergy then, as now, often enough prescribed for the people and being educated men, did so with some semblance of right. You will remember how difficult it always was in ancient times to separate the priest from the doctor. They were identical. In England it was the bishops who granted licenses to practice medicine previous to 1518. The Swedes and the Dutch were the settlers in this part of the State in 1623-1627. Twenty years later the English took possession in their usual peaceable and Christian style.

The clergy were the early doctors. In fact they made it their business to study medicine in England before they emigrated. But wherever there was a real doctor in this State he did not always stick to his work, but often took part in politics, land speculations and farming. It seems to us

of the northern part of the State that the political doctor still flourishes down here. In olden days they had to do something besides practice medicine. If there had been gold mines, marble quarries or Wall Street stock we would have found them there.

In that nicely written history of Medicine in New Jersey, by our late fellow, Dr. Stephen Wickes, he tells us that one Charles Gorden, wrote to his brother, Dr. Gordon, in England, to come on as a planter or a merchant. "The climate is so salubrious," he says, "that there is nothing to do for a doctor except some aguers and cutted fingers and legs, which, however, are well taken care of by the Empiricks."

Kalm in his travels in 1748, speaking of Cape May County, says: "It is remarkable that in Cape May County no regular physicians have ever found support. 'The women do the prescribing.' Some one suggested that nature takes its course for the better of the patient. Possibly some one quoted thus, 'He that sinneth before his Master, let him fall into the hands of the physician.'"

It looks as if there might have been more danger from the physician than the disease. This of course applies only to those days. In these latter days we know better in spite of that medical nihilist, Dr. Osler. Our medicines are sure cure. The doctors present will understand that, but there are many laymen among us and I am asked to blow our own horn. In those older days Medicine was under no kind of regulation, and quacks abounded like locusts in Egypt. Any reader of the New York Herald will see that they still abound, however. It was said of New Jersey in the days of Governor Carteret that the soil was fruitful, and the air wholesome and the country "worthy of the name of Paradise because it had neither lawyers nor physicians nor parsons."

It will interest you to know that among the three public hospitals for smallpox first erected in this country one was opened in Elizabeth-town. Aye more than that; the founder of that hospital was asked to go to Philadelphia, and show them there how to inoculate for smallpox.

About the time of the birth of this republic Medical Education was received by apprenticeship. If the teacher knew little the scholar would know less. Thanks to the New Jersey Medical Society, the law was enacted that every apprentice must have some preliminary education in Latin and Greek. The apprenticeship lasted four years, one of which may have been spent

in some school of Europe or America. New Jersey never boasted of a Medical School except during a short period when Queens College of New Jersey, now Rutgers College, had a medical pendant in New York. Princeton attempted it later but failed.

The great pride of the Medical Men of New Jersey must always be in the Medical Society of the State of New Jersey. It is the oldest State Medical Society of our country. Its first meeting was on July 23rd, 1766, at New Brunswick, sixteen doctors being present.

Permit me to read to you some of the noble and high-minded sentiments expressed in their Instruments of Association, sentiments to which we all subscribe at this day and which evermore should have our utmost respect:

Whereas: Medicine is one of the most useful sciences to mankind, and at the same time the most difficult to be fully attained, so much so that, indeed, perfection therein is perhaps never to be acquired, the longest life spent in its pursuit always finding something new to occur, and lamenting something still wanting to perfect the art.

And as every means, therefore, that will tend to enlarge the stock of knowledge and experience of the pursuit of this science, should be eagerly sought after and prosecuted, etc., etc., therefore, moved by such sentiments, the Practitioners of Physic and Surgery in New Jersey, now assembled, HAVE AGREED to form ourselves into an amical and brotherly Society, to be called and known by the name of The New Jersey State Medical Society.

The Articles of the Constitution definitely state that a physician shall never enter a house to undertake a case except with the purest intention of giving the utmost relief that our art shall enable us to give.

That we should advise and recommend consultation in serious cases. That we will not pretend to or keep secret any nostrum or specific medicine of any kind, as being inconsistent with the generous spirit of the profession.

That as we have separated ourselves to an office of benevolence and charity, we will always most readily and cheerfully assist gratis, the distressed poor and indigent.

But the originators of this society were not only good men and physicians, they were also good patriots. When the war of the Revolution caused a break of six years in their meetings, they reconvened with a report of their regrets and their high approval of the part the members of this so-



ciety took in the opposition to British tyranny and oppression.

Thus was the MEDICAL SOCIETY of the STATE OF NEW JERSEY BORN.

### LECTURE ON SHOCK.

By Stuart McGuire, M. D., Richmond, Va.

*Professor of Principles of Surgery and Clinical Surgery, University College of Medicine, Richmond, Va.*

From *The Virginia Medical Semi-Monthly*, Oct. 9, 1908.

It has long been known that patients who met with accidents, or underwent operations not of themselves necessarily fatal, frequently died without apparent cause. It is only within the last century that it has been known that these cases died of shock. As soon as the condition was recognized, it was studied both clinically and experimentally by the leading men of the profession, and the literature of the subject is now a large one. The writers of the past generation had a clear conception of the causes and symptoms of shock, but they did not understand its nature, and hence the methods of prevention and cure were inefficient and unscientific. Within the past decade, Crile, of Cleveland, a leader in the new school of surgical physiology, has satisfactorily worked out its pathology, and the publication of his recent articles has revolutionized the practice of the profession in dealing with the condition. There are yet some apparently contradictory facts to be explained, and certain problems to be more fully elucidated, and, consequently, it will probably be best to introduce the subject by giving a clinical picture of a typical case.

**Typical Case.**—A patient who has been subjected to a mutilating, and perhaps, bloody, operation, is carried to the ward. When placed in bed, he makes no effort to move or speak, but lies staring at the attendants. His face is white and pallid, his features pinched and his eyes are sunken in their sockets, and encircled by black discoloration. He complains of no pain, expresses no anxiety, and his mental attitude is one of complete indifference. His skin is cold, and bathed in a clammy sweat. His lips and nails are blue, his pulse is rapid and thread like, or may be imperceptible at the wrist. His respiration is shallow, sighing and irregular. A thermometer placed in the rectum shows his temperature to be sub-normal. There is no muscular paralysis, but the patient lies perfectly still, and is disinclined to move. There is no unconsciousness, but he does not speak unless spoken to, and then answers questions in slow monosyllables. If reaction does not follow, the pulse gets weaker and finally disappears; the respiration becomes more shallow, and the skin clammy and colder, and "this momentary pause in the act of death is soon followed by the grim reality." A post-mortem examination shows no pathologic change to explain the symptoms.

**Causes of Shock.**—1. *Loss of Blood.* This is by far the most frequent cause of shock. In fact, a sudden hemorrhage produces symptoms so identical with shock that it is difficult to distinguish the two, and a diagnosis can often only be made by the history, or the blood findings.

The more rapid the loss of blood, the more severe the shock, and the less chance of recovery.

2. *Loss of Heat.*—The abstraction of body heat by operating in a cold room, exposing the abdominal or other viscera to the air, or wetting the clothing of the patient with solutions which, while warm at the time, soon become cold, all strongly tend to produce shock.

3. *Loss of Time.*—An operation which, if quickly done, would produce no appreciable degree of shock, if unduly prolonged, frequently is followed by alarming symptoms. This is partially due to the fatigue, exposure and prolonged anesthesia to which the patient is subjected, but is also due to the continued irritation of the brain and spinal cord by stimuli from the field of operation. Ether and chloroform prevent the appreciation of pain, but they do not protect the nerve centers whose exhaustion causes shock.

4. *Mechanical Injuries.*—These vary in degree from rough handling of tissues by the surgeon to a compound dislocation, or crushing injury of a limb by an accident. The various tissues and organs of the body have a shock producing power in proportion to their nerve supply, and, consequently, the degree of shock will depend not only on the severity of the trauma, but also on the sensory innervation of the part. Injuries to certain regions of the body are especially likely to be followed by shock, such as a blow on the testicle, in the pit of the stomach, or at the angle of the jaw.

5. *Burns.*—The action of intense heat on the nerve terminals of the skin often produces profound shock. Mummery has pointed out that burns of the first and second degree produce more shock than burns of the third degree. This is due to the fact that, in the first case, the nerve terminals are exposed and irritated; whereas, in the second, they are destroyed. A burn involving more than one-half of the body usually causes death from shock.

6. *Perforating Injuries.*—Rupture of the gall bladder, perforation of a gastric, duodenal or typhoid ulcer, or a rapidly fulminating case of appendicitis, resulting in the discharge of irritating fluids into the peritoneal cavity, frequently causes sudden and profound shock. It is supposed that the pus, gastric juices or intestinal contents act on the peritoneum as heat would act on the skin.

7. *Mental Emotions.*—The psychic condition of the patient undoubtedly influences the occurrence of shock. There is no reason to doubt that violent emotions, such as intense fear or terror, can exhaust the nervous power and produce the same results as a physical injury. A case is on record where a man who had been sentenced to death by bleeding actually died on hearing water trickle into a basin, which he supposed to be blood issuing from his veins. Another case is quoted where a man fainted and died under the impression that an operation was in progress, when the surgeon was, in fact, only tracing with his nail the line of incision on his perineum. Brunton quotes the case of a janitor of a college who had rendered himself obnoxious to the students. One night they carried him to a lonely place, and having dressed themselves in black, tried him for his life. He at first affected to treat the incident as a joke, but was assured by the students that they meant it in real earnest. He was found guilty, and was told to prepare himself for death. He was blindfolded and made to kneel before a block, and was struck on the back of the neck with the edge of a wet towel. He fell



to the ground, and, to the astonishment and horror of the students, they found that he was dead from the shock. In addition to the foregoing exciting causes of shock, there is considerable influence exerted on its production by the age, sex, temperament, mental condition, and general health of the individual. The young and old are more likely to suffer from shock than those of middle years. Women, as a rule, stand injuries and operations better than men. Those of sanguine or nervous temperament suffer more from shock than the lymphatic. The chronic invalid usually stands surgery better than a robust man, and a patient who comes to the operating table confident and hopeful is less likely to develop shock than one possessed with gloomy forebodings as to the future.

*Pathology of Shock.*—Shock is stated by Crile to be essentially due to an abnormally low blood pressure. The normal blood pressure is dependent on three factors: First, a proper force of heart beat; second, a proper rate of heart beat; and third, a proper peripheral resistance. The effect of variation of these factors may be stated in several definite laws: 1. The blood pressure must vary with the *rate* of the heart, if the heart strength and peripheral resistance remain constant; 2. The blood pressure must vary with the *strength* of the heart, if the heart rate and peripheral resistance remain constant; 3. The blood pressure must vary with *peripheral resistance*, if the heart strength and heart rate remain constant; 4. The blood pressure may be normal if one or two factors increase, while one or two factors decrease; 5. If all three factors increase, we must have a proportionate increase in blood pressure; 6. If all decrease, we must have a proportionate decrease in blood pressure; 7. All three factors are controlled by the nervous system.

Shock is due to irritating or painful impulses which are produced by accidents or operations. These impulses act on the centers of the brain and cord, first causing stimulation, but later resulting in exhaustion or paralysis. They may be of such a degree as to at once overwhelm the centers, or they may produce the same result slowly, by acting continuously for a considerable period of time. Crile believes that shock is invariably due to paralysis of the vaso-motor centers and consequent loss of peripheral resistance. Howell believes that it may also be due to feeble heart action. Accepting the latter conclusion, as seems borne out by clinical facts, shock may be defined as a condition characterized by long continued low blood pressure, due either to partial or complete paralysis of the vaso-constrictor centers, and consequent lack of peripheral resistance (vascular shock), or to alterations in the rate and force of the heart beat, due to partial or complete loss of activity of the cardio-inhibitory center (cardiac shock). Whether the low blood pressure be due to vascular or cardiac causes, the result is the same. The face becomes blanched, the skin pallid, the temperature sub-normal, the pulse weak and thread-like, the respiration shallow and sighing, the muscular power impaired and cerebration blunted. These changes are due to lack of sufficient circulation to maintain normal physiological function. The blood does not flow freely through the arterial system, but accumulates in the dilated venous trunks, especially in the abdominal region. In other words the arterial system bleeds into the dilated venous system, and, as the old writers

put it, the patient may bleed to death in his own vessels.

*Symptoms of Shock.*—1. Facial. The expression of the face is frequently so altered that it is difficult to recognize the individual. The pupils are but slightly changed, but the eyes are sunken in their sockets, the lids half closed, and the areolar around them darkened. The nose is small and shrivelled, and the lips are thin, pale and usually parted.

2. Cutaneous. The skin has a sickly pallor, and the surface of the body is cold and bathed in clammy sweat. The fingers and nails are of a bluish color, and the skin on the palmar aspect of the hands lies in loose folds.

3. Mental. The patient is not unconscious, but the mental faculties are less acute than normal. He complains of no pain, expresses no anxiety as to his future, and shows no interest in what is being done for him. If asked a question, he will reply intelligently, but slowly and with effort.

4. Muscular. There is no paralysis, but reflexes are diminished, and the voluntary and involuntary muscular systems are greatly relaxed. The patient lies in the posture in which he is put, and does not voluntarily change his position or move his limbs. There is frequently loss of control of the sphincters, with involuntary discharge of urine and feces.

5. Respiratory. Respirations are, as a rule, quickened, irregular and shallow. In grave cases there is gasping, although air hunger is never as marked as in pure hemorrhage.

6. Circulatory. The condition of the pulse varies with the degree of shock. It is usually small, thread-like, and, at times, imperceptible. The strength of the pulse is an important guide to the surgeon in making a prognosis.

7. Temperature. The temperature is sub-normal, a thermometer placed in the rectum frequently registering as low as ninety-five or ninety-six degrees Fahrenheit. Much lower temperatures are reported from observations taken in the axilla, but these are not reliable.

*Terminations.*—Shock may terminate in either of two ways: 1. Reaction. If recovery ensues, the patient begins to move about in bed, turns on his side, and perhaps vomits. The pulse gets fuller and slower; the respiration deeper and more regular; the skin warmer and dryer, until finally there is a return of the system to its normal condition; 2. Death. In fatal cases of shock, the pulse grows weaker and finally disappears. Respiration becomes shallow and irregular. The skin grows colder; the patient gradually becomes unconscious; the sphincters relax, and he slowly expires.

*Diagnosis of Shock.*—The diagnosis of shock, at the present times, cannot be made with scientific accuracy, and must be based on the personal experience of the surgeon. It is made on the symptoms above described, especially the weak, rapid pulse, the cold, pallid skin, the sub-normal temperature, and the curious condition of the mental faculties.

The differential diagnosis between shock and hemorrhage, syncope, fat embolism, hysteria and other conditions with which it may be confused, is sometimes difficult. In hemorrhage, the symptoms are usually gradual in onset, and progressive. The patient often faints, recovers, and faints again; and is usually restless, tossing from side to side in bed, and expressing great anxiety about his condition. In syncope, there is



usually preliminary nausea, ringing in the ears and dizziness, and when the actual attack ensues, the patient becomes completely unconscious. In fat embolism, the symptoms usually develop twenty-four hours after injury, when there is sudden pallor, irregular heart action, difficult breathing, and perhaps convulsions. This occurs chiefly after fractures or operations on bone. Fat will be found in the urine. In hysteria, there are usually characteristic stigmata of the disease; the temperature remains normal, and careful observation will usually detect a flaw in the symptoms complex.

*Prognosis of Shock.*—This depends on the degree of the injury, the severity of the symptoms, the general condition of the patient, and the presence or absence of complications like septic infection. Shock may prove instantly fatal, as in death from a blow over the solar plexus, or the patient may live one or two days and finally die, or recovery may take place when hope has been practically abandoned. Shock, the result of profuse hemorrhage, is more dangerous than shock from other causes.

*Treatment of Shock.*—While much difference exists among surgeons as to the treatment of shock when it develops, there is a great unanimity of opinion as to the necessity of using certain measures to prevent its occurrence. Shock is rarely seen in a hospital where well conducted operations are skillfully performed on properly prepared patients. The call for curative treatment of shock is now principally seen in cases injured in railway accidents or other catastrophes.

*Preventive Treatment.*—1. Avoid fright, by gaining the patient's confidence, inspiring him with hope, and sending him to the table in good mental condition. If the operation be one of election, the surgeon should be absolutely frank in discussing the dangers of the procedure at the time the patient is considering whether or not to have it done. If, however, it is decided to do the operation, the surgeon should no longer refer to the possibility of disaster or death, but should become optimistic and dwell on the relief and benefits to be expected. If, at the time of the operation, the patient is nervous, it is often wise to give a hypodermic of morphine. In the case of a child, when possible, it is well to fix the hour of the operation so that the anesthetic may be given while asleep.

Sometimes an adult is met with who is so panic-stricken at the thought of an operation that it may be necessary to adopt the following method, suggested by Crile, which, of course, should only be carried out with the full consent of near relatives or friends. The surgeon tells the patient on his admission to the hospital that he does not know whether or not it will be necessary to operate on him, and that he will only undertake the case with the distinct agreement that he is to do whatever he thinks best. The consent of the patient having been obtained, he is subjected to considerable preliminary examination, and told that it is probable he can be cured by the inhalation treatment. An anesthetic goes to his bed at a certain hour each day, places a mask over his face, and lets him inhale alcohol, disguised with some aromatic agent. At the same hour on the day set for the operation, the alcohol is given as usual, with the slow addition of an anesthetic, until unconsciousness is produced, and the patient can be transported to the operating room. This expedient has, in Crile's opinion, enabled him to save several

hundred lives which would otherwise have been lost.

2. Avoid the loss of blood during the operation, by the use of Esmarch's bandages and constrictors in amputations, by angulation of the table in work on the head and neck, and by carefully and quickly catching and tying all bleeding vessels. Bloodgood says that a long, bloodless operation is less likely to produce shock than a short, bloody one.

3. Avoid the loss of heat by operating in a warm room, keeping exposed viscera and raw surfaces protected with hot, moist towels, and seeing that the patient does not become wet with solutions. It is also wise not to have the patient in actual contact with the surface of a glass or iron table, but to interpose some non-conductor, if not actually to put him on a hot water pad.

4. Avoid the loss of time, not by breathless haste, which might lead to imperfect work, but by having a distinct plan of operation in mind and executing its various steps speedily. Occasionally in extremely difficult and tedious operations, requiring more than an hour for their execution, it is well, if circumstances permit, to do part of the work one day and complete it one or two days later. Victor Horsley advocates this being regularly done in cerebral surgery—trephining and exposing the dura one day, and subsequently dividing it and doing the work in the brain structure.

5. Avoid bruising and tearing tissue, roughly handled or pulling on viscera. Dissection should not be made bluntly, and all manipulations should be gently carried out. The fact that the patient is under an anesthetic and his sensory centers unable to appreciate pain does not mean that his vaso-motor and cardiac centers are equally protected and he cannot develop shock.

6. Avoid division of large nerves, especially in weak patients, until these have been blocked by the intra-neural injection of cocaine. Crile says: "As no impulses of the kind can pass either upward or downward, there is no more shock in dividing tissue—even the nerve trunks themselves, thus blocked—than in dividing the sleeve of the patients coat." In operations on the lower extremity and pelvis, this principle can be more extensively applied by injecting the cocaine into the spinal canal at or near the fourth lumbar vertebra.

*Curative Treatment.*—When shock is actually in existence, treatment is of little avail, and in using remedies the surgeon should be careful that, if he do no good, at least he do no harm. Senn says that it is as important to know what not to do as to know what to do, and Warren emphasizes the fact that it should be clearly remembered that the condition is one of exhaustion, and that rest is needed for repair. As the symptoms of shock are those of profound weakness and prostration, it was long a practise to give stimulants, such as alcohol, digitalis or strychnine. According to the modern pathology, which is undoubtedly correct, these remedies do harm. The centers are already partly or completely paralyzed from over-stimulation, and the administration of strychnine, according to Mummery, is like beating a tired horse. It may call forth an effort if we beat hard enough, but it hastens the end. Or, to quote Crile, "It would be just as logical to treat strychnine poisoning with traumatic shock as to treat traumatic shock with strychnine." The only logical remedy is one which will act, not on the centers, but on dilated

vessels, restoring the peripheral resistance. Unfortunately, we have no satisfactory means to accomplish this end. The following is a brief description of the present accepted mode of treatment.

1. Secure physiological rest by placing the patient in a quiet room, excluding all friends and relatives, and giving a moderate dose of morphia. The surgeons and attendants should be calm and confident in their manner, and the patient should not be allowed to infer that his condition is unusual or alarming.

2. Apply external heat by placing the patient between warm blankets, putting hot water bags to the feet, thighs and body, and, in some cases, injecting hot fluids into the rectum.

3. Mechanically support the circulation by posture, by bandaging, or by the pneumatic suit. In mild cases of shock, all that may be necessary is to lower the head of the bed, thus gravitating the blood to the anemic brain. In graver cases, the limbs should be enveloped in elastic, non-absorbant cotton, and firmly bandaged from extremity to body. A compress may also be applied over the abdomen. Crile's pneumatic suit is an appliance by which the entire surface of the body is subjected to pressure by compressed air. Unfortunately, however, it is rarely at hand when needed.

4. Transfusion, with warm saline solution by rectum, beneath the skin, or in a vein. In cases of shock due to hemorrhage, this is the most logical and efficient method of treatment. In cases of shock from other causes, however, it is not so valuable. The average individual can only take up about two quarts of the solution. After this amount has been given an interval must elapse, and then only two or three ounces given at a time. If this precaution is disregarded, fatal complications may ensue from edema of the pulmonary or abdominal regions.

5. The administration of adrenalin chloride, which is usually effected by combining it with the saline solution used in transfusion, one drachm of the 1-1000 commercial solution being added to one quart of normal salt solution and introduced slowly, but continuously, the rate regulated by the character of the symptoms or the record of a sphygmomanometer.

#### QUESTION OF OPERATING DURING SHOCK.

In accident cases the surgeon is confronted with the question whether to operate at once or wait for reaction; whether he had better add the shock of an operation to the shock of the injury, with danger of death of patient, or whether he had better wait, hoping for improvement, but possibly sacrificing the patient's only chance for life. There is no rule, although most authorities advise waiting, unless the mutilation causes great pain, or unless hemorrhage is actually in existence. On the other hand Wainwright says: "To remove the nerve impulses after trauma, an immediate repair of injury is very important. Leaving a mangled, oozing limb, with crushed and exposed nerves, with the hope that it will give more favorable opportunity for intervention, will, in many cases, by allowing the cause continually to act, only drive the patient in a condition beyond all hope."

(We gladly give space to this excellent lecture of Dr. McGuire's, recently delivered before his class in the University College of Medicine, Richmond, Va.—Editor.)

## MEDICAL JOURNAL EDITORIALS.

### THE CONFERENCE IN CAMERA ON BOVINE AND HUMAN TUBERCULOSIS.

From the A. M. A. Journal, Oct. 10, 1903.

One of the most important questions relating to tuberculosis is that regarding the transmissibility of the bovine type to man. When it was known that Prof. Koch would be at the International Congress on Tuberculosis it was expected that this would be the question of the congress, and so it proved. It was first brought forward in the joint meeting of Sections I and VII, at which Prof. Koch reiterated in part what he had said at the London congress in 1901. As will be noted by our report of this meeting, there was almost unanimous opposition to the position held by Prof. Koch, and when the meeting adjourned it was realized that little progress had been made in reaching an agreement. For this reason Prof. Koch himself suggested an intimate discussion of the points at issue in a conference *in camera*. This conference was held Friday morning, and the presence of such authorities as Koch, Arloing, Theobald Smith, Calmette, Tende-loo, Ravenel, Fibiger, Adam, Sims Woodhead, Eastwood, Courmont and others, stamped it as one of the most notable gatherings ever held on the subject.

This conference, however, also failed to produce complete agreement. Prof. Koch and his supporters, who were decidedly in the minority, still insisted that bovine is so different from human tuberculosis that infection of man by tuberculous cattle is reduced to a minimum; the opponents of this view holding that tuberculosis in cattle constitutes a most serious menace to public health, and one that urgently calls for eradication.

It is to be regretted that unanimity of opinion could not emanate from this particular conference. This would have offset to some extent Prof. Koch's failure to explain, both in London and now again in Washington, that his individual views regarding the rare intercommunicability of the two types have no practical bearing on the crusade being waged in all civilized countries for the eradication of tuberculosis in dairy herds. Scientific investigators very well understand Prof. Koch's attitude of scientific doubt and approve of it. But the ordinary man—the farmer and the politician—does not understand it and is very apt to misinterpret it, knowingly or unwittingly.



tingly, in that way which to him seems most profitable.

Prof. Koch, in the eyes of the public, stands as the great authority on tuberculosis, and his views, therefore, carry enormous weight with the ordinary layman. However tenable, therefore, Prof. Koch's position may be, however reasonable his doubt from a purely scientific and technical standpoint, it is to be deplored that on the practical points at issue, the humanitarian side of the appeal, he should not be found willing and even anxious to lend the authority of his great name to aid a movement that can only be productive of immeasurable good. Even if continued researches should ultimately show that the more common pulmonary tuberculosis in adults is caused solely by bacilli of the human type, they can hardly disprove that a certain proportion of the other forms of tuberculosis, especially in children, is of bovine origin. Children no doubt succumb to bovine tuberculosis; there may be only a few, relatively, but there may be a great many more than we are inclined at present to believe. There is certainly sufficient evidence to warrant energetic and carefully directed warfare against tuberculosis in animals used for human food and especially in dairy cows. Waiting until certain purely academic questions relating chiefly to problems biologic and statistical are brought to their ultimate solutions, is, in the light of our present knowledge, an indefensible attitude.

#### MISTAKES.

Editorial in the *Medical Standard*, August, 1908.

There is no disgrace involved in making mistakes, says the *Medical Standard*. Certainly there is no surrender of dignity in admitting them and making proper use of them. And no consideration of false pride should restrain the contributor to medical literature and medical education from declaring the whole truth about his personal experiences, even though it includes (as it undoubtedly will) the exposure of grave mistakes. If there is need of more genuine frankness as between the physician and the patient, and as between the medical man and the public, there is equal need of more genuine frankness as between members of the profession themselves in their presentation and discussion of medical subjects.

Nobody in the profession is expected to

know everything or to be infallible; only prigs are judged by either standard. In the case of the epitaphs on the tombstones of the dead there is a sentimental consideration that compels an observance of the old Latin maxim "de mortuis nil nisi bonum." So that the cases are not really parallel. In science there is no place for such sentiment. The calm, dispassionate recounting of an error, how it came to be made, and how discovered and remedied is often of infinitely more educational value than the glib recital of a series of apparently faultless achievements.

#### OF MEDICO-LEGAL INTEREST.

(From the *Wisconsin Medical Journal*, August, 1908.)

A legal decision of far reaching importance was recently given authoritative utterance by the Supreme Court of Iowa. The dissenting opinion, delivered by perhaps the most eminent member of that tribunal, shows a deep insight of the work of the physician, a keen knowledge of the tribulations besetting his path, and rare sympathy with him in the efforts that are frequently made to deprive him of deserved laudation and emoluments. Complaints, fanciful or real, are exaggerated in order to better assuage the suffering endured, and contorted to meet with the needs of legal—perhaps rather say legalized—proceedings.

The dissenting jurist champions the physician's cause in the following words:

"Though he does all a man can do and gives to a case the best fruits of a life of earnest study and investigation, he can not escape carping criticism, and the sick or injured person who is disappointed by his physician's inability to perform a miracle is easily persuaded to find solace in a malpractice suit, in which a sympathetic jury, stimulated by the sight of a wasted or crippled human form, is led to put a brand of undeserved reproach on one who merits the entire confidence and respect of the community.

Every physician who answers an emergency call, even though it be one of the numerous "charity cases" which daily demand much of his time and attention, takes his professional life and reputation in his hand, and when having vainly exhausted all the resources at his command some person inspired by ignorance, or malice, or hope of blackmail, holds him up with a damage claim, he ordinarily finds it to his

advantage to submit to unjust exaction rather than risk the uncertain outcome of such controversies in a court of justice." An impartial survey of legal opinions will often help to clear up the maze of uncertainty surrounding much that interests the physician.

A lucid interpretation of the findings in the suit in question, and some of the legal questions involved, are found in this issue of the Journal, contributed by a prominent member of the Milwaukee bar.

We shall, from time to time, publish statements reviewing opinions that have been handed down by the higher courts; and furthermore, should any of our readers desire to light upon the legal construction of problems interesting them, we will be pleased to comply to the best of our ability with their requests through our columns.

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#### PREVENTIVE MEDICINE AND FEES.

*(From the Illinois Medical Journal,  
Sept., 1908.)*

In our last issue we printed an editorial on the "Adjustment of Fees." We gave you some of the sentiment which exists as to the disproportion between the fees obtained by surgeons and the fees obtained by physicians, the former requiring largely technical skill and the latter requiring diagnostic ability and the responsibility, not only for the advice of surgical interference, but responsibility for the ability of the surgeon whom he calls to operate. This condition of affairs has resulted in part because of the growth of preventive medicine. The general practitioner, because of his small fees, feels that it is necessary for him to do his own surgical work that he may receive sufficient remuneration for his needs. We believe that a sharp distinction should be drawn between medicine and surgery. It is fair to conclude that the man who is skilled in surgical technic is better equipped to do surgical operations and meet the emergencies which may arise at any time during such an operation than is the man who only occasionally has the opportunity to make a major operation.

On the contrary, we are firmly of the belief that the man who is in charge of the treatment and management of medical cases, who intelligently studies the action of drugs and who carefully studies the methods of treatment of diseases other than surgical, is the man to be trusted with cases which do not require surgical interference.

It has been a frequent experience of physicians that they have had great difficulty in collecting fees for medical service, where the patient had not hesitated to pay a large fee for a surgical operation which this same physician advised. The public has been rightly educated to believe that surgical operations are expensive. They have not been taught to believe that medical services are of equal importance to the patient and of equal value to the patient. It will necessitate a full co-operation on the part of surgeons and physicians in fully convincing the patients that good medical service is valuable and should be properly compensated for. The evolution of the adjustment of fees involves the very practical question of the effect upon the earnings of the general practitioner. In truth, his work must be careful, his examinations thorough, and he must give the very best to his patients, for which he should receive adequate remuneration; but, added to a very large bill for a surgical operation, we may ask what of the patient's pocketbook?

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#### THE DOCTOR IN POLITICS.

*(From the Journal of the Camden County Medical Society, October, 1908.)*

Much has been said recently, in the medical journals and in the various medical societies of the country, tending to encourage the physician to enter politics, and even to seek office, with a view to being in a position to render aid to the profession in the accomplishment of the various reforms to which it is pledged, such as securing a representation in the cabinet of the President, and in combatting the wave of unfriendly legislation that has been sweeping over the country and buffeting the profession of the various States, in turn. Many who read this have journeyed to Trenton, year after year, to combat measures that were in the interest of a class, and inimical to the welfare of the people at large; and they know how narrow has been the escape from the enactment of statutes that would tend to negative the functions and purposes of the State Medical Examining Board. Some of the undesirable legislation has been prevented by reason of the presence of a physician on certain legislative committees, and in other instances because of the strong opposition of physicians who were legislators and the medical colleagues who gathered to their support; but all have realized how quickly



such bills would pass and become laws had no physician been present to combat them.

With a larger delegation of physicians in the Senate or Assembly it is unlikely that the health interests of the State would now be vested in a board in which the profession has only a theoretical representation. With an increased delegation in the future it will be more unlikely that the tuberculosis commission will be abolished and the interests of the Tuberculosis Sanatorium consigned to this same board of laymen, as, it is rumored, it is contemplated to do. As an instance of the potency of numbers, actuated by similar interests, it is only necessary to remind the medical profession of the practical impossibility of anybody securing legislation that the legal profession may consider undesirable. We can all recall the scant courtesy that was manifested toward bills introduced in three sessions of the legislature, seeking to render privileged the communications of patients to physicians. The lay members of the Senate or Assembly did not defeat these very proper bills; but the legal members did, because they thought that in some way it would interfere with their interests in trial cases.

The medical profession could be as invincible as the legal profession in the halls of legislation if it were as united in its aims and purposes as it professes it wishes to be. But, it cannot occupy this position until it is a follower of its own interests rather than simply a follower of party; until it ceases to be content with a few coroners and mayors of villages; until it places itself in an attitude that will enable it to ask, without expectation of refusal, that it shall have a fair percentage of the representation from various districts to the State and national law-making bodies.

Dr. Augustus Caille, of New York, recently stated that during twenty years as a teacher in pediatrics he had not met a single young hospital graduate, other than an externe of a children's hospital, who did not admit on inquiry his lack of knowledge regarding the line of professional work which made up one-half the practice of the family physician. Therefore it was evident that the present facilities for acquiring the knowledge necessary in this branch of medicine were wholly inadequate and that more practical instruction along the line indicated was urgently needed.

## Reports from County Societies

### CAMDEN COUNTY.

Henry H. Sherck, M. D., Reporter.

The October meeting of the Camden County Medical Society was held in the Dispensary Building, 725 Federal street, Camden, N. J., October 13th, 1908, Dr. Paul Mecray occupying the chair. Drs. L. E. Griscom and W. W. Knowlton, of Camden, were elected members of the society. Both of these gentlemen are of the homeopathic persuasion. Dr. Daniel Strock gave notice for an amendment of the constitution and by-laws, the purport of which is to create the office of assistant recording secretary, and the election of a scientific committee, whose duty it shall be to appoint essayists and also to provide those to open discussions of the various papers. Drs. Izard, Westcott and Markley were appointed delegates to the Cumberland County Medical Society for the remainder of the current year.

Dr. Paul H. Markley, of Camden, then read a paper entitled, "The Pathology and Symptoms of Myocarditis," which will appear in full in a later issue of the JOURNAL.

Some of the salient points elicited were that only recently has myocarditis received the attention it deserves. That sudden deaths near the crisis of disease were often due to myocarditis; that acute myocarditis was due to infection, and from the action of toxins on the heart muscle; that cardiac feebleness should always be viewed with suspicion. Chronic myocarditis due to fibroid infiltration.

Heart always enlarged. He then described the difference between fatty heart and one surrounded by fat. Heart failure often caused by trivial conditions, such as an attack of acute indigestion when the heart muscle is diseased. That the presence of a murmur is not significant of heart disease, and that according to Tabo the majority of murmurs are functional. That myocarditis often manifests itself in irregularity of heart beat.

Bradycardia and tachycardia are not always bad symptoms in themselves.

The case of the first Napoleon was referred to, he having a pulse rate through life of only forty to the minute. That Stokes-Adams disease was a symptom caused by the interference of the blood current through the bundles of Hiss. That heart pulsations were often not felt at the wrist, owing to weak heart action. He also described a condition known as beer heart, due to the absorption of toxins. According to Musser the pain caused by attacks was due in part to the dilated cavities of the heart. That pseudo-angina was sometimes confounded with true angina. That the first symptoms of neurasthenia were sometimes mistaken for myocarditis, and vice versa. That the careful study of personal history was essential. That it is estimated that the deaths from heart disease alone in 1900 amounted to 70,000. Schott claims that there are 500 deaths due to disease of the myocardium to 200 deaths from other diseases of the heart.

The doctor closed by saying that there is not sufficient attention given to these classes of cases.

Dr. J. R. Stevenson opened the discussion by referring to a case of tachycardia, due to mild

grippe poison, which persisted three months. Dr. Chavanne told of a family of six persons, four of whom died of myocardial disease. Dr. Godfrey thinks that grippie is the cause of a large number of cases of myocraditis. Dr. Presley gave her experience of the Nauheim baths treatment and laid much stress on the value of calomel, before any other treatment was instituted.

Dr. Baer said that we should never forget that in neurasthenia we may have the first signs of myocardial disease.

Other members who took part in the discussion were Drs. Ross, E. B. Sharp, Richardson and Sherk.

Dr. Harry Bushey, of Camden, was proposed for membership.

The members were delighted to have with them Dr. Sylvan Bushey, a former president, who was unable to attend the meetings during his occupancy of the office on account of illness. He has so far recovered as to be able to enjoy fellowship with his brother practitioners. The following guests were invited to sit as corresponding members: Drs. Heritage, Hunter, Oliphant, Williams, Halsey and Stout, from Gloucester County; Dr. Chavanne, from Salem County, and Dr. Hollinshead, from Burlington County.

Dr. William A. Westcott, candidate for State Senator, made a few remarks on the questions of the hour, which were well received by the members of the society.

Remarks were also made by Drs. Halsey and Strock.

### HUDSON COUNTY.

#### August Adrian Strasser, M. D., Reporter.

The first meeting of the season 1908-1909 of the Hudson County Medical Society was held at Lincoln Hall, Jersey City, October 6th. Dr. J. J. Mooney presiding. The meeting was very well attended, and the co-operation of the members was enthusiastic. In the report of interesting cases, Dr. G. K. Dickinson said that he was struck by a recent repetition of conditions rarely met and not always considered by the surgeons or consultant. He referred specially to the diverticula of the intestine, chief of which was the so-called Meckel's diverticulum, met usually only when diseased or at autopsy. He recalled having seen in all about a half dozen. He touched briefly on the embryological features producing the condition and detailed the varieties met with most frequently, laying stress on the cystic variety, where an attachment of the diverticulum to the mesentery or perhaps to the gut itself so frequently produces the loop which causes strangulation of the gut, or gangrene of the diverticulum. He had one case to report. Its diagnostic features were those of an ileus or an appendicitis, and differentiation was not always feasible before operation. Luckily all three conditions demanded early intervention, and if laparotomized early, the outcome was favorable. Dr. Faison reported a case of hyperthyroidism in a girl aged twenty, who has had the affection for the past seven or eight years. She had the classical symptom complex, exophthalmos, tachycardia and a goitre. Ligation of the superior thyroid arteries as practiced by Mayo, slowed down the heart sufficiently to build patient up and later partial thyroidectomy finished the cure. He reviewed the work and reports of the Mayo's in this field. He added that this was a true case where fright

was the chief etiological factor. Dr. Pyle detailed the history of a young man of 16 years of age, seen first on the fifth day of a pneumonia. On the tenth day his temperature dropped from 103 deg. to 98 deg. F. His chest was flat on percussion and aspiration developed the fact of a large empyema; much of the pus was withdrawn by the trocar. In twenty-four hours Dr. Spence resected a rib for him, finding but very little pus. This was peculiar, as the trocar had emptied so much. But while the patient was being etherized he vomited some, and a condition of shock supervened after the operation. He complained of severe pain in the abdomen, vomited incessantly, had a temperature of 97 deg.—96 deg. F. due to the presence of pus in the abdomen. Finally about six quarts of pus were discharged from the rectum. Cultures from this pus showed almost pure pneumococci. He developed excessive hunger and having run into adverse circumstances making it impossible for the family to supply the requisite amount of food, he was sent to the city hospital, where his death occurred in four days. (Laughter.)

Dr. George E. McLaughlin reported a case of tic douloureux in a woman of 55 years, which had lasted for six years. Codeia had given her the only relief until, on his recommendations, alcohol injections were instituted, and so far these have proven very successful. Three cubic centimeters of an eighty per centum alcohol were injected directly into the nerve. In a week a second injection was given. These caused no pain and resulted in an apparent cure. Dr. Fyfe reported that a patient came to him with a request to have his rheumatism cured. Examination showed that a synovitis was a more nearly accurate diagnosis, and to elicit a cause for this an X-ray picture was taken, which revealed the presence of three pieces of a knife-blade in the joint. These had entered the joint fifteen years previously and were supposed to have been removed. There was a difference of opinion as to treatment, so the patient had chosen to have nothing done.

Dr. Pollak reported a case of acromegaly. Dr. Koppel detailed the history of the fracture of an arm while engaged in lifting a pick; patient complained of an inability to lift the arm, but there was no interference with motion, though slightly impaired by the swelling. He had a previous fracture of the other arm which had not united. The X-ray showed the character of the recent fracture to be an oblique fracture of the ulna and a transverse one of the radius. Union would probably not result. He reported also a growth on the right side of a child's neck, rapidly growing. It proved to be a lymph-cyst (?) Dr. Lautmann detailed the findings in a woman, nineteen years of age; married one year, who consulted him for amenorrhea. Examination showed the external genitals normal. The vagina was one and a half inches long, uterus and adnexa were absent. The breasts also lacked nipples. He suggested the possibility of male hermaphroditism. Dr. Brown described a case of true rabies. The man, a Swiss, aged fifty-nine, was attacked by dogs and bitten on the left wrist and calf of left leg. He neglected any treatment and five weeks later noticed a slight stiffness of the muscles of the neck and back, and general muscular soreness, fatigue and apprehension. This gradually developed into a true hydrophobia, characterized by difficulty in swallowing, at first



solids and later even liquids; an attempt causing violent spasms. He was sent to the hospital for observation. He manifested extreme anxiety and muscular spasms on the most trifling stimuli. Symptoms grew worse progressively; he became maniacal and temperature went from 102° to 104° F. just before death which was preceded by three hours of coma. The New York Board of Health conducted the autopsy and made the brain sections. These were not of great moment, as they showed but few changes in the cellular tissue. Dr. Goldstone reported a case of pneumococcus peritonitis in a patient who had pneumonia at the same time. The paper of the evening was by Dr. A. J. Walscheid (which will be forwarded for publication in the JOURNAL, on "Results of Injuries to the Skull." The discussion was led by Dr. Faison, who emphasized the necessity of differentiation between concussion and contusion of the brain cells. The surgery of the brain should be that of the severe case always. Even the usual scalp wound may endanger life by a sinus thrombosis. Dr. Hill elucidated Cushing's subtemporal decompression operation and took issue with the terminology of the paper. Dr. Dickinson stated that severe injuries do not necessarily precede severe effects. There is relation of the simplicity in production in some cases and the compression seen frequently in the first born, which he thought an indication for early application of forceps in labor cases. Frequently there is a thickening of the dura and cicatrices are found during operation. Another condition not usually met with is that of the patient hit by a baseball, causing a flattening of the skull two or two and one-half inches long, with the attending symptoms of a laceration. Dr. Brown reported a case where, after a skull injury, there were at first no symptoms at all; later those of a depression. The patient died and autopsy showed an extensive hemorrhage in the parietal and occipital region. Dr. George McLaughlin reported three cases of head trauma by falling on the head direct, that came to autopsy, all of which had no mark externally. One case in falling struck on the back of the head. There was a distinct change in disposition. There was found a large hemorrhage into the frontal lobe. Dr. Pyle argued against the too early use of obstetric forceps, as more often conducive to cerebral trauma than the natural forces of delivery even if delayed. Dr. Vreeland gave it as his experience that the apparently most severe cases recovered, while those that seemed trivial often went wrong. Dr. T. J. McLaughlin spoke on the nature of primary cerebral trauma, while Dr. C. Nay detailed the history of a case where death ensued three hours after a fall in a saloon. There was no injury to the scalp, but autopsy showed a linear fracture of skull. Dr. Walschied, in closing the discussion, cleared up his terminology, stating that he gauged the amount of contusion by the degree of unconsciousness; if this lasted more than a few days he would diagnose laceration of brain substance or compression. He had been struck with the fact how often petechiae were found in brain cases. The cases of concussion alone do not usually cause a fatal issue, but the trauma underlying it often causes death.

Dr. J. M. Rector, chairman of the legislative committee of the County Society, asked for the hearty support of the membership of the committee's work. Dr. Culver, chairman of the din-

ner committee, handed in his report. There were seventy-two diners present at the annual dinner. New members elected were H. J. Spaulding, of Weehawken; H. W. Brown, of Jersey City, and N. F. Feury, of Secaucus. Through the chair Dr. Koppel sought information as to admission to the County Tuberculosis Hospital. Dr. Pollak answered, stating that the full quota could not yet be accepted, especially of that class that had been immediately unloaded upon the hospital, even before its completion. The regulation of these admissions by the Freeholders and to attain the best service for the community was, on motion, referred to the Legislative committee. A communication was read by the Legislative committee whereby it was discovered that no physician had been found ready to serve in the assembly and assurances had been given by all parties to support any physician who would run on either ticket irrespective of party lines.

In order to prevent any financial loss to the society a resolution was offered by Dr. Hasking for action at the next meeting to the effect that hereafter all application for membership be accompanied not only by the initiation fee of one dollar, but also one year's dues. The meeting then adjourned and a collation was served and a social session followed.

## MIDDLESEX COUNTY.

### Benjamin Gutmann, M. D., Secretary.

The regular quarterly meeting of the Middlesex County Medical Society was held at Metuchen, Wednesday, July 15th, 1908. Dr. Riva, president, was in the chair. There was a very good attendance.

On motion, the sympathy of the Society was extended to Dr. S. V. D. Clark, on account of his continued illness.

Two propositions for membership were received.

The following interesting cases were reported by members of the Society: A case of Myeloid Leukaemia was reported by Dr. Benjamin Gutmann.

Case—P. M.—white—age 27. Family history negative. Had pneumonia at 13, pleurisy in June, 1907; otherwise always in good health. Present illness began November, 1907, with a feeling of weakness and lassitude. Later, had considerable pain after eating, with eructations of gas, nausea; no vomiting. Occasional attacks of diarrhoea. Past few weeks had daily attacks of nose-bleed. Dyspnoea, swelling of feet and ankles. Has kept at work with greatest difficulty.

Examination: Inspection in erect posture showed bulging over whole of left side of abdomen. A large mass was palpable and extended to pubes below and border of right rectus muscle. The edge of the mass was round in outline and notched. Liver somewhat enlarged.

Blood examination as follows: Red blood cells, 1,650,000; white cells, 373,000. (Differential leucocytic account made, but was lost.)

Treatment: Patient was temporarily put on ascending doses of Fowler's solution, with considerable improvement. It was intended to try systematic X-Ray treatment, as has been recommended, but the patient, unfortunately, left for his native country.

The report was made by Dr. Riva of a case

of second ectopic pregnancy in the same patient. (Given in another column.)

Dr. Riva also reported a case in which a piece of knife blade had been in the parietal bone, projecting in the skull cavity for five years, with a history of four convulsions during that time. The knife blade was removed. Within the space of two days, the patient had seven convulsions. On being trephined ten days later, an abscess about the wound was found, together with a small piece of the knife blade. The patient died following the operation.

(We regret exceedingly that a full report of Dr. Gutmann's very interesting case referred to above was lost in the printing office during the confusion incident to change of ownership and pressmen.—*Editor*.)

OCTOBER 21, 1908.

The regular meeting of the Middlesex County Medical Society was held at the Packer House, Perth Amboy, October 21, 1908. Dr. Riva, the president, was in the chair.

It is characterized as being one of the most enthusiastic and largely attended meetings which have been held in several years.

The main paper of the day was read by Dr. Otto Kiliani, of New York, the subject of which was "Alcoholic Injections for the Cure of Trifacial Neuralgia." An abstract of the paper will be given in our next issue. The paper was discussed by Drs. Ramsey and English.

A vote of thanks was tendered Dr. Kiliani for his most interesting paper.

Dr. E. E. Eulner, of South Amboy, and Dr. W. T. Davis were proposed for membership.

An interesting case was reported by Dr. Herman Gross, of Metuchen, as follows:

A case of latent tertiary syphilis with gastro intestinal manifestations.

Mr. S. S.—Age 38.—Hungarian. Came to my office for first time September 11th, 1908. Father died at age of 78. Mother at 45. Causes unknown to patient. Two brothers and two sisters—all alive and in good health. Ages 35 to 50. He has been in this country for seven years, during which period he worked in foundries, around furnaces, then at a saw, in a cotton factory, and lately is a storekeeper. He is of temperate habits. He is married and his wife has given birth to five children, all of whom died in infancy. No still births, no abortion, no marks on the children so far as patient knows. Patient had a sore on his privates while in the army, at age 22 or 23, which has healed. Does not remember any rash. He was well up to about three months ago, when he began to lose appetite, had pain in his stomach with diarrhoea, no blood, some mucus, also pains in his leg and began to lose flesh and strength.

On physical examination found patient is very pale and emaciated. Temperature is normal, pulse small and rapid—between 90 and 100. Heart and lungs appear to be healthy. Claims to have lost about thirty-five pounds in past three months. Tenderness over pylorus, no sore throat, no baldness, no glandular enlargements. Knee reflexes, exaggerated, absence of eye symptoms, as well as Romberg's sign.

During the past three months the patient has been to several doctors, none of whom have taken a history, and very few have made any physical examination, besides taking the pulse, and looking at his tongue. Some have told him he had consumption, others that they were positive that all that ailed him was that he was

anaemic. Probably they, too, thought that he was a consumptive. His appearance looked that of a phthisical person. He has no cough, nor is he subject to colds. The question in my mind arose: Is this man suffering from catarrhal gastro duodenitis? Ulcer of the stomach or duodenum? Malignant growth of pylorus, tubercular peritonitis, or was his sore fifteen years ago a chancre, and is he suffering from a latent manifestation of tertiary syphilis?

From the history of the case, and also recalling the early history of another of my patients, now afflicted with *tabes dorsalis*, who at one time had almost the same gastro-intestinal troubles, I made a tentative diagnosis, of *latent tertiary syphilis with gastro-intestinal manifestations*.

In considering treatment another problem arose. How shall I treat his diarrhoea and gastric disturbances? Shall I give him K. I. in large doses, with all these disturbances? I prescribed Ol. ricini, one ounce; elix, pepsin, six drams; tinct, opii camph., two ounces. M. Sig. Shake well and take all at one dose.

Then K. I. 25 grs. in solution, t. i. d., and as a tonic, syr. hypophos. co. quinia, ferri, strych. et arsen, one dram. In water every three hours. Milk diet for two days.

September 14th. Patient reported to office. Stomach feels good. A severe attack of inflammation of choroid, with pus in anterior chamber of left eye, which came on rapidly on evening of September 12th. Bowels checked. While patient was alarmed, I was pleased on account of the strengthening of my belief that my diagnosis was correct, and having recognized the disease, I hoped to be able to relieve his symptoms, and possibly check the disease from further progress.

I gave him K. I. 30 grains, t. i. d., syr. hypophos. co. as before and added inunctions of ung. hydrag., one dram, t. i. d.; for his eye, sol. atrop. sulph., one per cent. Sig. gtt. 1, t. i. d. Also hot application for fifteen minutes to eyes every two hours, and a dark room.

September 16th. Both eyes inflamed. Had followed out all instruction except hot applications to eye. Patient is constipated. I gave him sod. phos. one ounce, in water every three hours, until effective. All treatment continued except K. I. September 18th. Eyes cleared. General condition much improved. Appetite good. Continue medication and returned to K. I. 25 grains, t. i. d. October 10th. Body weight appreciably increased, color of face improved. Abdominal pain and tenderness entirely disappeared. Reflexes normal. Some pain in calf of legs, probably due to weakness, as patient was able to attend to business for past two or three days. Pulse stronger, fuller, and down to 80. Still under treatment, and promises to keep under observation for several years.

I report this case, 1. To show importance of taking a history; 2. Not to make a diagnosis from simple appearances of a case. This man looked like a typical picture of a person in advanced state of phthisis; 3. The rather peculiar and uncommon manifestation of latent syphilis of this man's case had gone unrecognized. This man would probably have been in his grave by this day without proper treatment. Syphilis is not a self-limited disease; 4. If some brother will kindly enlighten me why the eye manifestations did not appear until after treatment was begun.



Dr. A. C. Hunt gave the history of a case of leprosy, which had been found at the Camden Almshouse. The boy came from New Barbadoes two years ago, and was employed as a boot-black in Camden. Seven months ago his hands began to contract, and there was evidence of a diseased condition of the toes.

The patient had been in a hospital in Philadelphia, and was discharged with the statement that nothing could be done for him. He then applied to the Overseer of the Poor, and was sent to the Almshouse at Blackwood.

Dr. McDonald, surgeon of the U. S. A. at Fort Mott, who has had experience in cases of leprosy, examined the patient and stated that it was the best developed case in the United States.

The patient is isolated, and an effort will be made to place him in some leproserium.

Dr. Bela G. Illes, of New Brunswick, was elected a member of the Society.

The following resolution was offered:

Resolved, That it is the sense of the Middlesex County Medical Society that members of this Society who have been nominated for political office in this county, should be supported by the members of this Society, and that any of our members who have been nominated for local offices, as mayors of cities, etc., should be supported by the members residing in the respective cities and towns.

The resolution, after discussion, was adopted *nem con.*

The following are the candidates nominated: For member of Assembly, Dr. William E. Ramsay, Perth Amboy. For coroners, Drs. Martin Meinzer, of Perth Amboy, and William J. Condon, of New Brunswick. The above are county nominations.

For mayors, Dr. Ambrose Treganowan, South Amboy; Dr. Frank C. Henry, of Perth Amboy, and Dr. Alfred L. Ellis, Metuchen.

The Society adjourned to meet at South Amboy, January 20, 1909.

## SOMERSET COUNTY.

A. L. Stillwell, M. D., Reporter.

The regular bi-monthly meeting of the Somerset County Medical Society was held at the Ten Eyck House, Somerville, October 8.

Dr. William K. Simpson, Professor of Laryngology, College of Physicians and Surgeons, of New York city, was present and favored the members with a paper on Epistaxis. Dr. Simpson spoke of the intrinsic and extrinsic causes of epistaxis, and dwelt at some length, and with emphasis, among other causes of epistaxis, of nasal diphtheria, and spoke of the presence of the Klebs-Loeffler bacillus in the great majority of cases where there was any membrane in the nasal passages. Dr. Simpson spoke of the importance of making examination and finding the bleeding point in every case of hemorrhage, and called attention to the zone about the lower portion of the septum and of lesions in this situation as causative of bleeding. Of intrinsic causes, traumatism and foreign bodies were dwelt on. Unilateral epistaxis accompanied with muco-purulent discharge very frequently or nearly always being due to a foreign body.

In the treatment of this condition he spoke of the use of hydrogen peroxide, adrenalin, glycerate of tannin and tamponing the anterior walls. He

showed us a special tampon on the principle of Bernay's sponge and recommended plugging the posterior nares only as a last resort. In the interval he spoke of the application of nitrate of silver to the ulcerated surfaces and as a constitutional remedy lactate of calcium, and he also spoke of its use in cases of hemophilia and where there was delayed coagulability of the blood.

There was a large attendance at this meeting. Light refreshments were subsequently served.

## TRI-COUNTY MEDICAL ASSOCIATION.

MORRIS, SUSSEX AND WARREN.

C. B. Smith, M. D., Secretary.

The tenth annual meeting of the Tri-County Medical Association, (Morris, Sussex and Warren), was held in Washington, Warren County, October 13, 1908. Forty-one physicians were present.

Dr. A. C. Van Syckle, of Hackettstown, president, had a paper prepared on Placenta Praevia and Its Treatment," but for want of time was not read.

Dr. James Douglas, of Morristown, vice president, read an interesting paper on "Puerperal Eclampsia and Its Treatment."

It has always been the custom of the Association since its organization to have with us one or two men prominent in the medical profession. This year we were exceedingly fortunate and honored in having with us Prof. Graeme M. Hammond, M. D., of the New York Post Graduate School and Hospital, and Prof. Willy Meyer, M. D., of the same college. Prof. Hammond's address on "The Pathogenesis and Treatment of the Degenerative Nervous Diseases," appealed most strongly to his hearers, it being concise, practical and full meat. A few brief sentences fixed the status of a nerve fibre in one's mind; a paragraph showed the wonderful strides in the knowledge regarding the degeneration of spinal cord fibers in diseases hitherto regarded as functional, but the crowning point was the frank admission of failure to fix specific causes, such as syphilis, in diseases hitherto largely regarded as due to this disease. For example, locomotor ataxia was shorn of its syphilitic taint to a large degree. Its treatment by massive doses of mercury and iodide of potassium was relegated to the medical scrap-heap. The prediction of revolutionizing the pathology of ataxia, by treating of the urethra was dismissed with a move of the hand. The use of strychnine sulphate in ataxia, optic neuritis and other nerve diseases, was dressed in a new dosage that attracted instant attention. Four-fifths of a grain three times daily, reached after months and years of gradual increase, had accomplished brilliant results in the speaker's experience. In optic neuritis, a widening of the visual field had occurred, even though the acuity was not increased. The striking physique, optimistic smile, and manner attractive by its simplicity, will make the speaker's deduction and advice long remembered.

Equally frank and conservative was Prof. Willy Meyer on "Bier's Hyperemic Treatment." Its practical application in furuncle, carbuncle, mastitis, and gonorrhoeal rheumatism, was demonstrated as advisable for use in general practice. Among those who participated in the discussion

were Dr. Harris of Paterson, Dr. Ill of Newark, and Drs. Michler and Greene, of the Easton Hospital Staff.

The following officers were elected for the ensuing year:

President, Dr. J. B. Pellet, Hamburg; vice presidents, Dr. James Douglas, Morristown; Dr. J. M. Reese, Phillipsburg; treasurer, Dr. F. W. Flagg, Rockaway; secretary, Dr. C. B. Smith, Washington; executive board, Dr. Bruno Hood, Newton; Dr. Stephen Pierson, Morristown; Dr. F. W. Curtis, Stewartsville; finance committee, Dr. H. W. Kice, Wharton; Dr. E. Morrison, Newton; Dr. C. M. Williams, Washington; committee of arrangements, Dr. Bruno Hood, Newton; Dr. E. Morrison, Newton.

The Association dined at the Hotel Windsor.

### CAMDEN CITY MEDICAL SOCIETY.

#### J. Watson Martindale, M. D., Secretary.

The regular monthly meeting of the Camden City Medical Society was held in the Dispensary Building, October 8th. In the absence of the president, Dr. W. I. Kelchner accepted the chair.

Dr. J. Anson Smith, of Blackwood, was proposed for associate membership; referred to the standing committee.

Dr. J. W. Martindale read a paper on "Salpingitis." The paper was discussed by Dr. J. L. Baer, H. H. Sherk, P. M. Mecray, H. H. Davis, D. Strock, D. Benjamin and Emma M. Richardson.

Drs. Tyson, resident physician of Kensington Hospital, and Westcott, of Berlin, were present and were invited to take part in the discussion.

### THE INTERNATIONAL CONGRESS ON TUBERCULOSIS.

The International Congress on Tuberculosis, held in Washington from September 21 to October 12, is now a memory only. Those whose misfortune it was not to have attended these interesting deliberations, missed a rare treat. One cannot refrain from mentioning the completeness in every detail of program, arrangements and exhibitions. The task was herculean, but seemingly not too much for those in charge, and congratulations are in order. Some apology, however, is due our distinguished foreign guests for the incompleteness of the building in which the congress was held. In itself, the unfinished condition of the building was to be tolerated, yet our great government should have shown a little more consideration, and had the stone and brick masons, carpenters, roofers and laborers desist from their too apparent and noisy demonstrations in trying to complete, in one week, the half completed new National Museum building assigned for this extremely important event. During the first few days the din drowned the voices of essayists and speakers. A compromise, seemingly, was later effected and the noises were lessened, yet at times were too painfully present. It seemed, almost, as if we were meeting in the government cannon foundry.

The exhibits were such that it required hours to inspect them, even casually, and days could be spent profitably in studying their import, from the displays of instructive signs, instruments, literature on how to combat, prevent and cure,—

attracting medical and lay interests alike,—to the many exhibits along pathological lines showing the effects of the tubercle bacillus on man and beast. Of the foreign nations, Germany had the most complete exhibits. Of our own nation, the Empire State with her chief city, outdid herself, and many of the other states made a very creditable showing.

While Missouri confined her work along educational literature lines, the little book "What Missouri is Doing," was sought after and many favorable comments were expressed. The supply was soon exhausted, the book finding its way into appreciative hands. Although Missouri did not make a display, she was considered the good worker along the right path in the West. We also, to our credit, showed effective work done, such as the Mt. Vernon Sanitarium and the splendid organization of some of the Missouri cities and counties; the work in St. Louis, of educating the masses in the unique outdoor lectures, received favorable comment on many occasions.

The scientific program was divided into seven sections, seven different meetings on different subjects; in several languages, all referring to the bacillus tuberculosis, were held at the same hours each day; however, joint sessions of two or more sections on allied topics, were held; and to the credit of the programme committees it must be said that all essayists were on hand and everything moved with clock-like precision.

Secretary of the Interior Cortelyou, in his opening address, gave valuable statistics, gathered by the government, which appalled even those who were versed in such lore. Among the more striking points in this address were the statements, that in 115 years of yellow fever scourge, a less number of deaths could be attributed to this cause, during all that period, than to the one disease tuberculosis in the year 1907 alone; that three times less deaths occurred in action and from wounds during over four years of the Civil War than from consumption during the past four years. He made the further statement, that if a war in the United States were to carry off 150,000 people each year, we would be horrified beyond measure, while such, in fact and figure, is the annual loss from tuberculosis.

After short talks from many of the foreign delegates and representatives, in as many different languages, the now world famous Congress on Tuberculosis was declared at labor.

Germany was well represented by famous men, Koch, staid and stoic, the cynosure of all eyes, receiving ovation after ovation in a calm, expressionless and dignified manner, while every one wondered what new thing he might have to say to startle the nations. His position was the same as that which he expressed in 1901, during the British session, that human infection by bovine tubercle bacilli rarely occurs; clinging tenaciously to the rarity of its occurrence he admitted that it does occur. His splendid tribute to the work of Dr. Theobald Smith, of Boston, who first called attention to the different biological features of human and bovine tubercle bacilli, which Koch acknowledged caused him to pursue further researches, was proudly received and applauded by the American contingent, the other nations joining heartily in the applause. Professor Smith, from that moment raised to the eminence of being the next most important personage in the



meeting, rose to discuss Prof. Koch's able paper, and it was at once seen that he differed widely from the views expressed by the eminent German. One notable quotation was to the effect that in one-half of the babies afflicted with tuberculosis glands of the neck and in the abdomen, cow's milk had been the traceable cause of the infection. Prof. Arloing of Lyons, France, concluded his remarks by saying that his experience revealed the fusion of the classic types, and urged the necessity of extreme precaution against tuberculosis, both human and bovine. Koch's own government aligns herself against Koch's views, recognizing even more strongly than his opponents the expediency of strict bovine inspection to avoid the spread of tuberculosis in Germany. Dr. Raw, of England, while appreciating two distinct infections, said his work and observations led him to the conclusion that with the eradication of bovine tuberculosis infant mortality from this cause would be reduced to a minimum. Dr. Newsholme, of England, after multifold experiments, concluded similarly regarding its transmissibility. Our own Ravenel, of Wisconsin, after numerous experiments, has proven, indisputably, the similarity of both forms of tuberculosis, and would regard it as extremely unfortunate if the impression should go forth from the meeting that few cases were due to bovine tuberculosis infection. Prof. Koch's extreme stands seems unfortunate; his influence is such that his views on the extreme rarity of bovine infection can be so garbled as to make it appear that bovine infection, as a cause of tuberculosis in the human, is nil; and the American people are so readily convinced that the great Professor Koch must be right, that such a result would be most unfortunate for man. Koch admits, however, that the infection does occur; be it but once in one thousand it is once too often, and we must not lose sight of this serious fact. We must consider also that for several years he has been engaged in other bacteriologic channels, and while his conclusions may be accurate through the work of others under his guidance, it must not be forgotten that the Americans, the French, the English and other Germans were there who personally reported what their findings were and concluded with one accord against Prof. Koch. It is therefore hardly a case of the one man of the jury considering the other eleven obstinate. We can not and would not so view it, because it would be untrue, but a difference of opinion of rarity and common occurrence does exist. And by far the majority of equally painstaking workers lean toward the commonness of transmission.

In Section 7 (Tuberculosis in Animals and Its Relation to Man), a rather impressive paper was read by Hess of New York, in which he stated that in 107 samples of milk, taken from dairy wagons promiscuously, he found 16 per cent. contained tubercle bacilli. And thus throughout the meeting, in every section, research work was reported and all without exception unequivocally opposed Dr. Koch's ideas of the rarity of the occurrence of bovine infection in the human.

The feature of early diagnosis seemed next to attract widespread attention. Von Pirquet demonstrated his cutaneous reaction at the Children's Hospital. He now uses the Koch Old Tuberculin pure—not the 25 per cent solution he at first advocated. Detri, at the same time, offered his combined cutaneous method,—vaccination with

human and bovine tuberculin—to show by which bacillus the child was infected. If by bovine tubercle, the bovine inoculation should show a reaction in from 12 to 24 hours; if by human tubercle bacillus the area of human tuberculin would react. It is seen therefore, that many conclusions can be arrived at. Time and work under less exacting surroundings will prove their percentage utility.

Calmette was there, and his paper dealt with the ophthalmologic reaction. His results were gratifying in 6,000 cases and he had met with no unfortunate experiences; but every one else apparently had a more or less different result to relate, for it seemed that the ophthalmologic reaction is on the wane. It may be said at this point in passing that the lay press, ever alive to the dramatic, seized upon this discussion and made the most of it as a news feature; while the ever loquacious, garrulous doctor, rushed into print and objected to something concerning which he had no conception, either as to its *modus operandi* or its diagnostic value.

The serum treatment came in for an afternoon of interesting discussion. Many serums were shown and many views, encouraging and discouraging, were expressed, showing that the experiments and results obtained are widely at variance. In a few years, perhaps, more definite results in larger numbers may bring the Utopia in serum treatment.

If the work of this famed congress did no more than impress facts that are old, and revive the interest of the world in this dread destroyer and teach that prevention is best and that early recognition and early cure offer the most favorable results, its work can be called blessed.

It should be a source of great pride to the medical profession of this country that the attendance at this congress was so large, that the interest was so intense and that American physicians and the American people have been found to be fully alive to the great opportunities before them, and fully capable of meeting and solving problems that are agitating the greatest intellects in the world in the work of preventing and curing disease. In this labor the newspapers of this country are beginning to show a high appreciation of the part which they should play in furthering the objects to be attained, and during the congress all the great dailies throughout the country gave largely of their space and faithfully reported the deliberations of this great gathering.

(We insert the above excellent account of the Congress by L. H. B. in the editorial columns of the Journal of the Missouri State Medical Association, October, 1908. Editor.)

## MEDICAL DAY IN FOUNDERS' WEEK.

Philadelphia, Pa., October 8, 1908.

From the North American, Philadelphia, Oct. 9.

America's pioneer in the establishment of medical hospitals and schools, the city of Philadelphia, has always maintained its standing as the first of American cities in all things medical, and in some of them she may now claim to be the leading city of the world.

Thus spoke Dr. J. V. Shoemaker, in submitting the report of the Medical Day committee on institutions, colleges and hospitals at the Medical

Day meeting of Founders' Week in the Walnut Street Theatre yesterday.

The theatre was crowded with medical men of Philadelphia and other cities. Dr. Shoemaker called attention to the fact that Philadelphia was the first home of a hospital. The first medical college, the first pharmaceutical college, the first medical association, the first journal of pharmacy, and the first medical literature all came into their American being in Philadelphia.

The largest and best equipped laboratories for medical, chemical and bacteriological research in all the world are now in Philadelphia. London alone exceeds Philadelphia among all the cities of the world in hospital capacity, but in equipment, in treatment, in provisions for sanitation, and antiseptics, and in all the requisites of the modern hospital, Philadelphia is not only unexcelled, but is unequalled.

### Handbook of Hospitals.

The speaker referred to the new volume concerning the scientific institutions, colleges and hospitals of Philadelphia, and said that the great work, which will include a complete history of all the institutions of Philadelphia, with that of the men who made them, will be issued soon.

This work was the subject of a report submitted by Dr. Charles K. Mills and Dr. Frederick P. Henry. Professor J. P. Remington presented the report of the committee on historical exhibit, and said that the exhibit now upon the fourth floor of the City Hall contains a complete collection of all the records of the various institutions of the city from the very beginning. This exhibition will remain open for two weeks.

Dr. L. Webster Fox, chairman of the committee on Medical Day, submitted his report with an interesting address on the reunion in which the assemblage was participating.

Professor George A. Pierson, of the University of Pennsylvania, delivered an address upon "The Medical Colleges and Allied Institutions," and Dr. J. Solis Cohen spoke on "The Great Teachers of Philadelphia."

### City's First Doctor a Swede.

Dr. James M. Anders talked on the "Development of Practical Medicine in Philadelphia." After pointing out that we of the present day must feel devoutly thankful to the founders of medical science in Philadelphia—to Kearsley, Cadwalader, the Bonds, the elder Shippen, Morgan, Jones, Rush, Gerhard and many others, whose enterprise was not guided and assisted by well-equipped laboratories and overfilled hospital wards, he continued:

"The first representative of the medical profession, so far as is known, was Jan Petersen, a barber, of Alfendolft, who was surgeon to one of the Swedish colonies on the Delaware at a salary of ten guilders a month, beginning July 10, 1638.

"The Swedes were a simple people, but the colony brought by Penn was made up of the best of British. To the standard set by the Welsh Quaker doctors who accompanied the colonists is largely due the advanced professional position taken by Philadelphia in its incipency.

"In 1699 the city suffered an epidemic of yellow fever, and about 220 deaths occurred. In the following year, when Philadelphia had about 700 houses in the neighborhood of the Delaware wharf, the first quarantine law was passed. It was as quarantine physician that Dr. Thomas

Graeme served the city more or less constantly during forty years.

"During the next decade a number of men destined to fame in the annals of Philadelphia medicine rose slowly above the horizon. Some of these had been apprentices of John Kearsley; others occasional attendants at his lectures, and several, although later, went abroad to amplify their medical knowledge."

### First Hospital Founded.

Among the latter, much credit was given by Dr. Anders to Lloyd Zachary, Phineas Bond, Thomas Bond, Cadwalader, William Shippen, Jr., and Morgan, for bringing about the more important earlier advances in practical medicine in Philadelphia.

Thus, Thomas Bond was the first to recognize the advantages of the institution method of treating diseases, and the first to found a hospital, namely, the Pennsylvania Hospital, at Eighth and Spruce streets, while it was reserved for Morgan to found the first school in America devoted to the teaching of medicine, the medical department of the University of Pennsylvania.

Philadelphia was also the home of the first specialties in America, such as surgery and obstetrics.

"During the Civil War," Dr. Anders said, "the largest of all military hospitals was situated here at about what is now Forty-fourth street and Osage avenue, West Philadelphia. It should be pointed out that the first organization of women as nurses for the military hospitals was in Philadelphia, in 1861, and was known as the Philadelphia Nurses Corps.

"It should be our pride that in the tuberculosis crusade Philadelphia leads all cities of the Union. The magnificent accomplishments of the Phipps Institute, aided by the health departments of the state and city, as well as by the Pennsylvania Society for the Prevention of Tuberculosis, make a most impressive showing in humanity's fight against this dread disease. Moreover, there are signs of a public awakening to the possibility of a successful advance upon the great white plague, both in the direction of prevention and cure."

**Hospital in Hotel.**—An emergency surgical hospital, the first of its kind in New York City, has been opened in the basement room of the Waldorf-Astoria, New York, near an all-night drug store. A complete outfit for emergency surgery has been installed, and Dr. C. T. Adams and Dr. Robert Adams have been placed in charge.

**The National Association for the Study of Epilepsy** and the Care and Treatment of Epileptics will hold its eighth annual meeting at Indianapolis, Ind., on November 10 to 11, 1908. The president of the Association is Dr. H. M. Weeks, of Skillman, N. J., and the secretary, Dr. J. F. Muson, of Sonyea, N. Y. The objects of the Association are to promote the general welfare of sufferers from epilepsy, to stimulate the study of the causes and methods of cure of the disease, to assist in establishing a proper system of care for epileptics, and to advocate the care of epileptics in institutions designed to meet their special needs. As this is the first time the Association has met in the West, it is hoped that there will be a large attendance.



## NEW JERSEY SANITARY ASSOCIATION

Thirty-fourth Annual Meeting at Lakewood,  
N. J., December 4, 5, 1908.

The thirty-fourth annual meeting of the New Jersey Sanitary Association will be held in the Laurel-in-the-Pines Hotel, Lakewood, on Friday and Saturday, December 4 and 5, 1908, the first session beginning at 3:30 p. m. on Friday. John B. Duncklee, C. E., president; James A. Exton, M. D., secretary.

The following papers are given in the program that has been arranged: "Sanitary Inspection of Schools," by W. G. Schaffler, M. D., Lakewood. Discussion opened by Superintendent S. E. Shull, Perth Amboy. "The Necessity for Schools of Instruction for Health Officers," by John L. Leal, M. D., Paterson. Symposium on Tuberculosis: (a) The Necessity of Bovine Tuberculin Test, by O. V. Moors, D. V. S., Dean of Cornell University; (b) Methods of Organization in the Tuberculosis Campaign, by W. C. Smallwood, secretary of New Jersey Anti-Tuberculosis Association; (c) Home and Sanatoria Treatment; (d) After-care of the Discharged Patient. Authors of last two not yet announced.

President's address. The Reclamation of Lands Subject to Tidal Flow, by John B. Duncklee, C. E., South Orange. The Washington, D. C., Aqueduct and Filtration Plant, with slides, by E. D. Hardy, C. E.

The progress of mosquito extermination work in New Jersey, with slides, by Professor J. B. Smith, Sc. D., New Brunswick. The Sanitation of a Clean Mind and a Happy Disposition, by Rev. H. M. Gesner, Atlantic City. Pollution of the Delaware River; Its Cause and Remedy, by H. M. Herbert, C. E., Bound Brook. The Modern Treatment of Sewage, by Emil Kitchling, C. E., Brooklyn, N. Y. The Prevention of Dust on Highways, by James Owen, C. E., Montclair.

Several committees will present reports and the officers for the next year will be elected. The hotel, one of the best in the State, gives a reduced rate to members and their families.

**The Increase of Lunacy in England and Wales.**—The report of the Commissioners in lunacy, just issued, shows that on January 1, last, there were in England and Wales 126,048 persons (35.67 per 10,000 of the population) certified as insane—2,096 in excess of the previous year. In the past half century a notable increase in insanity has been recorded. On January 1, 1859, the number of certified insane was 36,762, on which the latest figures are an increase of 243 per cent. During the interval the increase of population has been only 79.6 per cent. A steady increase in the number of certified insane is shown by the report.

## False Death Certificates.

False certificates of death in cases of Christian Science treatment have been freely alleged in the daily press. It is charged that certain physicians make a practice of signing such certificates—for a consideration—even when they know nothing of the case and have not been called in until the patient is moribund or already dead. We hope the practice will cease if it has really existed, for public policy demands legal investigation of every death where qualified physicians have not investigated the cause. The

coroner's duty is not an anachronism by any means, and physicians must not be instruments whereby murders are concealed. It is quite possible for such crimes to be committed and then hidden under the cloak of an assumed Christian Science treatment—accepting the alleged diagnosis and signing a certificate of death by natural causes, whereas it might be a real case of death by poison or violence.—*American Medicine*, September, 1908.

**Connection Between Diseases.**—This article in *Therapie der Gegenwart*, Berlin, reviews Riffel's tables showing the mortality in three generations of the entire population of several villages—4,000 souls. They show that a number of diseases which we never think of connecting with each other in reality have certain relations. This can be better understood when it is seen how they develop on a common soil. The tables show, for instance, that cancer occurred almost exclusively in tuberculous families. The tuberculous families furnish 149 of the 165 pneumonia deaths; 44 of the 48 deaths at childbirth; and 25 of the 28 deaths from heart defects, and 48 of the 50 deaths from meningitis. Apoplexy, typhoid, gout, emphysema and asthma do not accompany tuberculosis, but seem to take its place in the second generation, the tuberculosis reappearing in the third generation.—*A. M. A. Journal*.

**First Harvey Society Lecture.**—Prof. A. Calmette, Director of the Pasteur Institute of Lille, France, delivered the first lecture of the course at 8:30 p. m. on Saturday, October 24, at the Academy of Medicine. The subject of the lecture was "Intestinal Infection and Immunity in Tuberculosis." Dr. Calmette spoke in French, but printed translations of the lecture were available for those who desired them.

## The Society for the Relief of Widows and Orphans of Medical Men of New Jersey.

The following new members were elected at the September meeting of the trustees:

Dr. G. B. Gale, of Verona; Dr. C. W. Banks, of East Orange; Dr. C. G. Berardinelli, of Newark.

## New Members of the American Medical Association from New Jersey:

Butler, Charles V., New Brunswick.  
Chattin, J. Franklin, Trenton.  
Durand, J. I., Atlantic City.  
Lee, T. B., Camden.  
Roberts, Joseph E., Camden.

## New Members of County Societies—Reported:

Camden County—Drs. L. E. Griscom and W. W. Knowlton, of Camden.

Hudson County—Drs. H. W. Brown, Jersey City; N. F. Feury, Secaucus; H. J. Spaulding, Weehawken.

Middlesex County—Dr. Bela G. Illes, New Brunswick.

Names with dues should be promptly sent to Dr. Chandler. Dues sent before Dec. 1st, \$2, entitling to back numbers of Journal from June. After Dec. 1st, \$1, entitling to Journal from Jan. 1st, 1909.

# THE JOURNAL

OF THE

## Medical Society of New Jersey.

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NOVEMBER, 1908

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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### PRIZE ESSAYS.

President St. John of our Society has appointed as the Prize Essay Committee, Drs. Charles J. Kipp, of Newark, chairman; David C. English, of New Brunswick, and Stephen Pierson, of Morristown. They have chosen as the subject for the essays Ex-Ophthalmic Goitre. Full notice of the conditions of award will be given in the next issue of the Journal.

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Readers of the JOURNAL have probably noticed its gradually increasing size and are probably not unmindful of the fact that this involves an increased cost. They may, however, need to be reminded of another fact, that our revenues are considerably augmented by the receipts from the advertising columns. Advertisers are attracted not only to those journals which have a large circulation, but especially to those whose readers are led to patronize them. The Committee on Publication would, therefore, suggest that all of our members read the advertisements appearing each month and, as far as consistent with their needs, give preference thereto—remembering that as we cordially welcome all reliable advertisements, the advertisers also are entitled to due consideration at our hands.

W. J. C.

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We acknowledge with thanks the receipt of the following papers recently read before County and City Medical Societies: "Observations on Gastric Ulcer," by Dr. D. A.

Currie, before the Bergen County Society; "Prevention of Mental Disease," by Dr. F. C. Horsford, before the Morristown Medical Club; "Affections of the Ear Due to Adenoids," by Dr. N. L. Wilson, before the Union County Society, "The Results of Injuries to the Skull," by Dr. A. J. Walschied, before the Hudson County Society, and "The Development of the Navy Corps to Meet Modern Requirements of Specialization in Medical Practice," by Surgeon General Rixey, U. S. Navy, before the Essex County Society. We will give them as early insertion in the JOURNAL as possible.

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### ELECT WORTHY PHYSICIANS.

The October quarterly Journal of the Camden County Society contains the following:

Dr. William A. Westcott, of Berlin, Camden County, has been nominated for State Senator, and his candidacy gives an opportunity for the physicians of this district to put in practise the professed principle that the profession of this section of the State should have a representative in the legislature. No member of our society is better adapted by mental equipment and loyalty to the interests of the profession to combat or frustrate wrongful legislation.

We endorse the above and express our belief that not only should Dr. Westcott be elected, but every other physician who has been nominated and is as well qualified, and whose election would reflect honor upon our profession, and conserve the best interest of our State, should also receive the active support of the members of the profession in their respective counties.

We call attention to Dr. Strock's excellent editorial which we give on page 307 entitled "The Doctor in Politics."

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### A JUST JUDGE.

In another column will be found an editorial with the caption, "Of Medico-Legal Interest," from the Wisconsin Medical Journal. It is worthy our attention and gives us the satisfaction of knowing that there are jurists who are capable of appreciating the difficult and sometimes unavoidably unsuccessful work of physicians and surgeons, and who recognize and emphasize the fact that we are not miracle-workers or prophets, who can always foresee or foretell the complications that may



arise, possibly through the negligence of the patients. We only ask, as we have a right to ask, that justice be fairly meted out to doctors in suits for damages; certainly in suits that are evidently brought from malice, or for blackmailing purposes.

We know how juries are sometimes swayed by pathetic appeals in behalf of the suffering or crippled patient, not only in railroad, trolley and automobile accident suits, but also in suits for malpractice against doctors. The doctor in such cases asks, not for sympathy, but justice—a justice that recognizes his limitation and his best efforts, through approved methods, to get good results, and our judges should endeavor to secure him such justice.

#### HIGH IDEALS IN JOURNALISM.

We desire to thank the editors of several medical journals and also the many physicians who have written us for their kind words of approval of our views as expressed in our editorial on Advertising; but we are most pleased with the evidence their expressions convey that as a rule high ideals of journalism and of the physician's standing and responsibility, obtain among professional men. We give only one of the many expressed opinions, taken from the Camden County Society Journal:

We publish, in another column, an editorial from the *Journal* of the Medical Society of New Jersey, which we suggest should be carefully read, that its import may be fully understood. In these days of vituperative "writing up" that has lately dawned upon the profession, we can well believe that some courage is required to take the stand assumed by the *State Journal*, particularly when so many of the *State Society* journals act in this matter as if they feared the bogey man would get them if they don't watch out. It is either too early—or too late—in this era of medicine, to assume that the individual doctor cannot form an opinion without a guide. Frequently his preconceived opinion is strengthened by an attack that impresses him as unwarrantably unkind, and without sufficient apparent motive; and thus a criticism may overreach itself and fail of purpose.

We are inclined to differ on one point with our brother editor—we do not think there are now many journals that are governed by fear in their expressions. As to individual doctors and their opinions, possibly some need a guide, but we venture

to express *our* opinion that we—all of us possibly, ought to do a little more careful thinking before we form an opinion and express it, and none of us ought to accept other's opinions without thought.

We thank the editor for his kind personal words on page 17 of his journal. Our desire is that our *Journal* shall become more worthy the profession and the Society which it represents.

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#### MEDICAL DAY IN FOUNDERS' WEEK.

The editor was privileged to attend the exercises of Medical Day of Founders' Week—the 225th Anniversary of the city of Philadelphia, Pa. It was an occasion of deepest interest. We were impressed by the excellence of the reports and addresses. The setting forth of the character of work of the great men of our profession in the early years of our country's history was of thrilling interest. We were glad to have memory refreshed by the recalling of the names of those men from Jan Petersen, the Swede, in 1638, down through the long list of brilliant men like Graeme, Zachary, the Bonds, Cadwallader, Shippen, Rush and Morgan, and the later men, as Gross, Liedy, Agnew, DaCosta, Dunglison, Pancoast and Pepper. It was our distinguished honor to have personally known the grand men of the last named list, and our contact with them was mainly through the meetings of our State Medical Society, where they were ever welcomed and honored—three of them were elected honorary members of our Society. Because of these facts and the courtesy received from members of the profession in Philadelphia on this occasion, our attendance at these gatherings on Medical Day will abide as one of the pleasant memories of our association with the worthy successors of the noble men of our profession of previous generations. An account of the meeting in the old Walnut Street Theatre, from one of the Philadelphia newspapers, will be found in another column, and we are pleased to know that the

addresses will appear later in a bound volume, which will prove a most valuable contribution to our medical historical literature.

Our medical brethren in Philadelphia have abundant cause for pride in their city as one of the leading centers of medical education and of well managed and successful hospitals. It was eminently proper that they should observe Medical Day in commemorating the noble men of the past and their splendid work. They built enduring foundations for the grand institutions that have made Philadelphia famous at home and abroad for medical education and liberal medical charities.

New Jersey has no medical colleges, we are not grieving over it. We certainly wish none of the standing of mediocrity that characterizes the majority. We should be pleased if Princeton University established a medical department which we could endorse and be proud of. Of hospitals, sanatoria, etc., we have many excellent ones. Speaking of the first hospital in this country having been established in Philadelphia, we may be pardoned for calling attention to an item in Dr. Ill's address at our Society's annual banquet. He says: "Among the three public hospitals for smallpox first erected in this country one was opened at Elizabeth-town and the founder of that hospital was asked to go to Philadelphia and show them there how to inoculate for smallpox."

Perhaps after all New Jersey physicians deserve some credit for Philadelphia's good medical record. We too had some grand men—able physicians and surgeons who were loyal to State, country and humanity's needs and possibly they gave a helping hand to the Philadelphia physicians in their heroic battle against the great epidemics of yellow fever in those early years.

We congratulate our Philadelphia brethren on their past historical records. May the future excel the past in all that makes for the advancement and honor of our profession.

## THE INSANE AND THE TUBERCULOUS.

We take from *The Evening Bulletin*, Philadelphia, of October 8th, the following which is worthy of, and should receive the earnest and careful consideration of the medical men and the taxpayers generally of the State of New Jersey:

An earnest appeal for the better care of the poor insane was today made by Dr. J. Solis Cohen, speaking before the distinguished physicians and surgeons who had gathered in the Walnut Street Theatre to celebrate Medical Day, in connection with the Founders' Week observances.

"The authorities," of the city," he declared, "should loosen the pursestrings that these unfortunates may receive the treatment due them. Go out to Blockley and look around. See the groups of silent, melancholy people, confined in crowded quarters, guards standing over them, their lot the worst imaginable.

"Then say that we have done as much for the poor insane as Benjamin Rush or Dr. Kirkbride. No true man or woman could make that assertion. Matters in these congested institutions for the indigent must be remedied. It is a question for the taxpayers to settle.

"Take, too, tuberculosis patients in the last stages of the disease. Ample provision should be made for their comfort. That, also, is a subject for taxpayers to consider."

We believe that the medical men of New Jersey—to a limited extent, are in sympathy with Dr. Cohen's remarks, and realize the need that exists in our State for action in the matter as not only due to these poor unfortunates, but as demanded by the highest considerations of duty to the State. The doctor says these are subjects for the taxpayers to consider and to settle. We know in New Jersey how difficult it is to get our legislators to act when adequate appropriations are called for, to carry out these great matters, which so vitally concern the best interests of our State and her citizens, while far less important measures are put through without thought of the taxpayers disapproval. We need to bring these subjects to the attention of the taxpayers and voters and urge them to demand of their legislators that they make adequate provision for these suffering citizens in the name of humanity and the State's honor.

Only two notices received of County Society meetings: Atlantic, Nov. 6 and 20th, 1908; Middlesex, Jan. 20, 1909.



### SUMMER OUTINGS FOR PHYSICIANS.

We note, with commendation, a new movement for the cultivation and extension of fraternal relations among medical men, in eastern Pennsylvania. The county societies of the lower eastern section of that State have inaugurated a form of summer outing, which is termed medical day, and the first reunion was held at Willow Grove Park, July 22, 1908. A large number of physicians were present with their families and enjoyed the occasion. Dr. A. M. Eaton, president of the Philadelphia County Medical Society, said: "This meeting is the commencement of (we hope) a series of outings for the physicians of Philadelphia and the eastern part of Pennsylvania. If successful we will extend at our next summer meeting, an invitation to the medical men of eastern Pennsylvania, the counties of Salem, Gloucester, Camden, Burlington and Mercer in New Jersey, and the county of New Castle in Delaware."

### INTERNATIONAL CONGRESS ON TUBERCULOSIS.

Elsewhere in this issue of our JOURNAL will be found an excellent editorial from the Journal of the Missouri State Medical Association, on the International Congress. The attendance was very large, all countries being well represented. Among the distinguished specialists from abroad were Drs. Koch, Calmette, von Pirquet, Arloing, Denys, Ladouzy, Krause, Beraneck, Gualano, Petruschky, Wolff-Eisner, Detre, Malmstrom, Comby, Teisser, and from our own country, among the large number, Drs. Trudeau, Flick, Knopf, Bowditch, North, Beck, Jacobi, Hutchinson, Smith, Copeland, Mayo, Dowd, Casselberry, Rodman, Baldwin, Sanborn, Corwin and others of prominence. We are glad that New Jersey was well represented.

The addresses of Hon. G. B. Cortelyou, Secretary of the Treasury, representing President Roosevelt, at the opening of the Congress, and of President Roosevelt at

the close, were eloquent and strongly appreciative of the grand work and results of these Congresses. They extended, on behalf of the government and the people a warm welcome to the foreign delegates; spoke of the work as in the interest of universal peace; that in joining in warfare against a common foe, the peoples of the world were brought closer together and made to better realize the brotherhood of man; that this crusade against disease, unlike some others in the past, was based upon exact knowledge and not upon empiricism, and the result of this Congress must greatly advance the power and effect of this crusade against this dread menace to national and international welfare.

The Tuberculosis Exposition was practically a "World's Fair," on tuberculosis and far exceeded any such exhibition ever seen before. It was of the greatest educational value, as it set forth the extent and variety of work along both purely scientific and practical lines, as it could not have been effectively done in any other way. Among the various national exhibits, those of Argentina, Austria, Belgium, Brazil, Canada, France, Germany, Great Britain and the United States were the most prominent. Of the latter, many of the States had their exhibits as well as that of the national government, the Bureau of Animal Industry.

The report of the health department of Chicago, upon one of the latest extensions of its work, is worthy of note. The plan for instructing mothers in the care of infants during the summer months has been tried with excellent results. In the seven weeks seventy-five medical inspectors, detailed to visitation and instruction, visited 43,784 homes. Cases of illness were found to the number of 2,410, a ratio which should impress upon the public and the authorities more than argument the need of this service.

Open air sanatoria, milk and water inspections, antitoxin and effectual quarantine of contagious diseases have been the chief agencies in the reduction of infant mortality. Education in prevention and care will undoubtedly lead to still further beneficial results.

## CORRESPONDENCE.

## British Medical Association.

DEAR DOCTOR ENGLISH:

Your letter of recent date requesting me to send you a short report of the meeting of the British Medical Association for insertion in the next issue of the Journal has been received. The meeting which I attended was held at Sheffield from July 24th to August 1st. It was the Seventy-Sixth Annual meeting, and was very well attended. The Association had met there in 1845, and again in 1876. Sheffield was a city of about 260,000 inhabitants at the time of the first meeting, and had increased to 460,000 at the present time. Then the association devoted two days to its meeting, and numbered about 500 physicians, now it devotes a full week, and numbers about 6,000.

The city feeling greatly honored at having this meeting held there did everything that could possibly be done to make it a success, and whether judged from the standpoint of numbers, enthusiasm, or scientific achievement, it certainly could not have been surpassed.

The people generally seemed to consider it a great honor to have the opportunity of entertaining the association, and they did it with an open-handed hospitality rarely equaled, never surpassed.

From a social standpoint it was a great success, while from a scientific standpoint all that could possibly have been desired.

The association is divided into seventeen sections for scientific work, each section having a full program. Many able papers were read by some of the most eminent members of the profession, and discussed by other members equally well known. The work of the sections began at 9:30 A. M., and closed at 1:30 P. M., leaving the afternoon and evening free for social pleasures. These were of many kinds, and kept one continually on the go, in fact there seemed to be no rest or time for idling during the entire week that I was there, and when I finally decided that I must leave and go up to London, I did it reluctantly, but with the feeling that if I did not get away, I should be a physical wreck.

The officers of the association were as follows:

President, Prof. Simeon Snell, F. R. C. S., D. Sc., Sheffield; president-elect, Sir. William Whitla, M. D., L.L. D., Belfast; past president, Henry Davy, M. D., F. R. C. P., Exeter; vice-presidents, twenty-two prominent men from England and one from Toronto, Canada; treasurer, Edwin Rayner, M. D., F. R. C. S.; general secretary, Guy Elliston; medical secretary, J. Smith Whitaker, L. R. C. P., M. R. C. S.

The Seventeen Sections also had their officers. The list of papers presented, as well as a list of the entertainments are probably too lengthy for you to publish.

The delegates from other countries were put down on the official program as the distinguished foreign guests, and they received marked personal attention, each one of them being entertained by private individuals. They were made honorary members of all clubs, and given the freedom of the city. They were guests of the association, of the city, and of the people, and everything was done that could possibly add to their comfort or pleasure. On leaving the city,

I could not help but exclaim "Long Live the King, the city of Sheffield, and the British Medical Association."

Sincerely yours,

ALEX. MARCY, JR.

Riverton, N. J., Oct. 16, 1908.

## Medico-Legal.

## Communications to Physicians Outside the State.—

The Supreme Court of Colorado has recently held that the statute concerning privileged communications does not apply to physicians practicing outside of Colorado, and not authorized or licensed to practice under the laws of Colorado. The statute in Colorado reads: "A physician or surgeon duly authorized to practice his profession under the laws of the State, shall not without the consent of his patient, be examined as to any information acquired in attending the patient, which was necessary to enable him to prescribe or act for the patient."

## Physician Fined for Violating Professional Secrecy.—

A Prussian physician was called to treat a young woman for syphilis. He advised her to tell the name of the man who infected her, a married teacher. The young woman lived with her sister, a midwife, with several children, and said midwife was attending the physician's wife at the time. The combination of circumstances was too much for the physician, a young one, and he felt justified in disregarding the obligation of professional secrecy. A provincial medical court of honor fined him a small sum because he had denounced to the local school inspector the married teacher who had infected the young woman. An appeal to a higher court of honor resulted in a reversal of the finding, stating that the collision or duties justified the action.

## Deaths from Poisonous Drugs Administered by the Unqualified.—

Lord Lyndhurst, in rendering a decision where a man administered poisonous drugs to a patient suffering from smallpox which caused his death, gave the following instructions: "If, where proper medical assistance can be had, a person totally ignorant of the science of medicine takes upon himself to administer a violent and dangerous remedy to one laboring from disease, and death ensues in consequence of that dangerous remedy having been so administered, then he is guilty of manslaughter. I shall leave it to the jury to say first whether death was occasioned or accelerated by the medicines administered, and if they think it was, then I shall tell them that the prisoner was guilty of manslaughter. If they think that, in so administering the medicines, he acted either with a criminal intention or from very gross negligence." The prisoner was convicted. In another English case the judge, where a blacksmith applied corrosive sublimate to a man who was suffering with cancer, and was convicted of manslaughter, told the jury to find the prisoner guilty if they thought he took upon himself the responsibility of attending a patient suffering from cancer without being qualified for the purpose. If he used dangerous applications he was bound to use skill, and in this case the prisoner's education and employment made the use of these highly dangerous substances almost amount to a want of skill.



### Admissibility of Evidence of Condition of Eyes as Proof of Internal Injury.

The Court of Appeals of Kentucky says that one of the questions in *Louisville Railway Co. vs. Ellerhorst*, a personal injury case brought by the latter party, was what evidence was competent to sustain the allegations of the plaintiff's petition. She alleged in her petition that she was injured in her womb, in her ovaries, in her bowels; that she had had frequent micturition; and that she had sustained a shock to her nervous system. A diseased condition must be manifested by outward symptoms. If the plaintiff had been unable to show any external manifestations of the injuries of which she complained, the jury would reasonably conclude that she was not as badly hurt as she alleged. If she had shown that she had suffered from insomnia since the accident, and had been a healthy woman up to that time, it would have been some evidence of a nervous derangement. A nervous shock often shows itself in the eyes; and, if the plaintiff's eyes had remained normal it would have been some evidence that the nervous shock was not very serious. Where specific injuries are sued for, any external symptoms which are evidence of the injury may properly be admitted, for it is only by the external symptoms that an internal injury may be judged. As the injury to the plaintiff's eye was not sued for, the court properly excluded it from the consideration of the jury in fixing damages; but, as it furnished some evidence of the internal injury of which she complained, the proof was properly allowed to go to the jury.

### What Constitutes "Prescribing Remedies" and the Practice of Medicine?

Chief Justice Lore, of the Court of General Sessions of Delaware, in charging the jury in the case of *State vs. Lawson*, said that the defendant was charged with practicing medicine without a license. Under the statutes of Delaware it is a misdemeanor for any person to engage in practicing the profession of medicine within the limits of the state without first having obtained a license therefor. The persons classed by the statute as physicians are designated as follows: "Every person (except apothecaries) whose business it is for fee and reward to prescribe remedies or perform surgical operations for the cure of any bodily disease or ailment shall be deemed a physician or dentist, as the case may be, within the meaning of this act." The defendant did not contend that he had a license to practice medicine, but relied on the defense that he treated his patients personally by hypnotism and massage, without prescribing any remedies, and that such treatment was not in violation of the statute.

The jury's inquiry then was: "Did the defendant for fee or reward 'prescribe remedies' or perform surgical operation for the cure of any bodily disease or ailment?" It was the duty of the court to instruct the jury as to the meaning of the words "prescribe remedies" used in the statute. In medicine to "prescribe remedies" is defined to be, "to write or to give medical directions; to indicate remedies." It is not necessary that such prescription should be in writing. It may be given or indicated verbally. Any direction given to the patient for drugs, medicines or other remedies for the cure of bodily diseases, directing how they are to be applied to

or used by the patient, is prescribing remedies, within the meaning of the statute. It would make no difference whether the direction was given by the defendant himself or by another person, even though such other person be a licensed physician, but engaged by and acting under the control and direction of the defendant in that particular in the conduct of his business. *State vs. Paul*, 56 Neb., 369; *Benham vs. State*, 116 Ind., 112; in re *Bruendle's Will*, 102 Wis., 45; *O'Neil vs. State*, 115 Tenn., 427.

If the testimony, therefore, showed that the defendant gave directions to or indicated to any of his patients that they use powders, plasters, baths of alcohol, whisky or mud, or other remedies of any kind, such direction or indication by him would be prescribing remedies, and make him liable under this statute. If the defendant was guilty of the crime charged in the indictment, it was the jury's duty to convict him. The laws of the state are designed to protect the community, and especially that portion of it which by reason of sickness and disease is peculiarly subject to imposition.

Verdict, guilty.

A. M. A. Journal.

### Damages for Injury to Bad Leg.

The Supreme Court of Missouri, Division No. 1, says that the plaintiff's injuries in the personal injury case of *Peterson vs. Metropolitan Street Railway Company* were permanent and serious. There was a fracture of the right femur at its neck, technically called an "impacted fracture," the broken bone being driven into the upper piece at the hip joint and held firmly. He was bedridden for a long time and suffered much. His right leg was shortened. His right foot was everted. The hurt leg being weakened, and its use impaired, the result was a halting and crippled walk. There was testimony that his right leg had been a bad leg for eighteen or twenty years prior to the accident. Below the knee it was afflicted with varicose veins, and indolent, chronic sores and ulcers, at spells swelling and suppurating, and this condition continued after the injury. But the proof did not show, nor did counsel argue that the leg, bad as it was, did not fill a useful and necessary office to Mr. Peterson. Clearly, the defendant had no right to negligently break the neck of the thigh bone of a bad leg any more than of a good leg. A leg might be so very bad that to break the bone of it would cause little damage, but here, considering the permanency of the injury in resulting deformity and weakness, and attending the inquiry, the court is of the opinion that, if the defendant was responsible therefor, and that responsibility was determined by a fair trial, a verdict of \$5,000 was little enough.

**The Precipitin Test: Its Value in Forensic Practice Shown by Numerous Cases.**—Uhlenhuth ("Das Biologische Verfahren zur Erkennung und Unterscheidung von Menschen Und Thier Blut") reports a number of remarkable cases, of which the following are those of special interest:

1. A man was accused of having stolen some fowls. Some blood stains on his clothes were, he alleged, due to rabbits' blood. Microscopic examination showed that the stains were due to the blood of a bird, and when their extract was treated with anti-fowl rabbit serum a distinct precipitate was at once obtained, while this anti-

serum produced only a slight turbidity after some time in solutions of the bloods of birds other than the domestic fowl.

2. A man was accused of having shot and killed a wagoner. He alleged that the blood on his clothing was due to the dripping from some meat. The precipitin test gave a positive result for human blood alone.

3. A woman was accused of having cut out the umbilical cord of her child with the scissors, and then having drowned the child. She claimed that the birth had occurred at stool, the cord was rent asunder, and that the stains on the scissors were due first to her having cut some plums and then then cut off the head of a pigeon. Autopsy demonstrated that the infant's cord had been cut and the stains on the scissors were found to be on extraction to give a precipitate with anti-human blood.

4. A man had entered a claim for sick benefit, having been found lying in bed, the clothes soaked in blood. He claimed to have had an attack of hæmorrhage during the night, but the precipitin test showed that the blood on the bed clothes was bovine, and he confessed that he had emptied a bottle full of ox blood on the bed clothes.

5. Sachs (Royal Institute for Experimentat Therapeutics, Frankfort on the Main) found a man lying in a pool of blood with twenty stab wounds in his chest which he said were inflicted by a butcher. The butcher on being questioned said that some stains that were found on his coat and trousers and one of his boots were due to the blood of a cow and a pig, which he had recently slaughtered. The extracts of the stains gave a positive reaction for pig's blood and a negative reaction for human and bovine blood. The scrapings from under the man's finger nails, which were sent for examination, were found to give a negative reaction for all three bloods.

6. Kochel (Institute of Legal Medicine, University of Leipzig): A man claimed as the result of accident to be suffering from a hæmorrhage from the urinary tract. The precipitin test gave a positive reaction for pig's blood, and it was found that he was pouring pig's blood into his urine from a phial.

7. Zeumer (*Zeitschrift für Mediz*, Beampte, 1902, p. 829) reports the case where a house was burned and a small piece of charred bone was found. A solution was made, filtered, and the clear filtrate tested with human, anti-pig, and anti-ox sera, the reaction being positive for the last named anti-serum only.—*Monthly Cyclopaedia and Medical Bulletin*, Philadelphia.

## MEDICAL AND SURGICAL CASES.

### Extra Uterine Pregnancy, Second Time.

Reported by Dr. F. E. Riva, New Brunswick.

Mrs. H., a Hungarian woman, with history of having had a laparotomy the previous May—1907—for extra-uterine pregnancy, was taken suddenly ill after having had a large motion from the bowels. The temperature at the time was 95.3-5; pulse 160, respiration 30. Vomiting was a constant symptom. This condition remained unchanged for two days, when she was admitted to the wards of the Wells Memorial Hospital. Upon examination per vagina a small, swollen mass could be felt, but very indistinctly, while on the left iliac fossa, by palpation, a mass the

size of an ordinary lemon could be easily found, and was visible due to the thin abdominal muscles. After washing up the abdomen with the ordinary solutions, an incision was made half an inch from the old one, commencing at the umbilicus and down to the symphysis pubis. Upon opening the peritoneum the mass upon the left iliac fossa proved to be a ruptured tube, with the umbilical cord attached to the placenta in the left fallopian tube and the foetus in the abdominal cavity. The tube was tied and severed and a large number of clots as well as the abdominal cavity washed out with a large amount of normal salt solution. The patient has made a good recovery. No correct correct can be found as to whether the previous tubal pregnancy was right or left, however, the fact is that she, as well as the surgeon and nurses well remember her case and are satisfied she did have a tubal pregnancy before in May, 1907.

### Piece of Knife Blade in Skull.

Reported by Dr. F. E. Riva, New Brunswick.

J. E., Pole, male, laborer. Requested to have a piece of knife removed, which he had carried for five years imbedded in the left parietal bone. He complained of pain if he laid on the left side of head. The pain was localized to the soft tissues of the scalp. After washing up the wound, I failed to extract the piece of knife. Subsequently the man consented to be etherized, and by chiseling the edges of the bone, a piece of steel, 1¼ inches long, was extracted. The man went home. On the afternoon of the same day and during the night he was taken with several epileptiform convulsions. The following day he was sent to St. ePter's Hospital, suffering with high temperature. His condition remained the same for about ten days, when on trephining the skull over the seat of the old wound, there was found an abscess in the dura mater containing about two ounces of pus, and still another piece of knife was found in the abscess. The man died about twenty-four hours after. Upon investigating it was found out that he had had a great many epilepticform convulsions during the five years he had carried the imbedded pieces of knife blade in the skull. The abscess was developed after the knife point had been removed, due to infection after removal producing a meningitis.

### Two Cases of Gallstone Ileus—Operation—Recovery.

The patients of G. P. Newbolt were women of 54 and 58 years respectively. The stones weighed when dry 303 grains and 280 grains. They were removed by longitudinal incisions in the gut. The main point of interest, says the author, was the type of bowel obstruction present. Though the symptoms were in both cases acute in onset and lasted some days, neither patient looked as ill as might be expected and the soft though distended abdomen with absence of tenderness on pressure was most marked. Both women were too stout to allow palpation either before or during anesthesia to give any information. Neither gave any history suggestive of malignant disease, and rectal examination during anesthesia was negative. Nor did the history of either case reveal any previous experience with gallstones.—*The Lancet*, Sept. 12.



### Delayed Menopause.

Dr. C. J. Whelan, in the *Chicago Medical Record*, April 15, 1908, reports the case of a woman who had first menstruated at the age of fourteen. Until she was sixty-two years of age her menstruation was regular, four-weekly. It then became three-weekly, and so continued at the time of report, when she was sixty-seven years of age. The woman claimed never to have been ill in bed two days in succession, even at the time of labor, although she had thirteen children and two abortions.

### An Unusual Type of Leukemia Complicated by Synovitis in a Youth, the Subject of Ichthyosis.

The patient of R. Waterhouse was a young man of 20 years, and the chief points of interest in the case may be summarized as follows: (1) the presence of ichthyosis, unusual in that the flexor surfaces were implicated to a greater extent than the extensor. (2) The supervention of a condition of leukemia characterized by deposits of lymphocytic cells in the lymphatic glands, bone marrow, spleen, liver, kidney, and elsewhere, but anomalous in the profundity of the anemia, the absence of increase in the total number of leucocytes in the blood, and in the presence of free iron in the liver and spleen. (3) The occurrence of a symmetrical synovitis of the knee joints due to a leukemic invasion of the synovial membrane. (4) The fact that the patient had only one kidney. Death came rather unexpectedly after a short period of restlessness and dyspnea. Full autopsy findings are given.—*Medical Record*, October 10.

### A Brain Tumor Localized and Completely Removed, with Some Discussion of the Symptomatology of Lesions Variousely Distributed in the Parietal Lobes.

Drs. C. K. Mills and C. H. Frazier, of Philadelphia, at the annual meeting of the American Neurological Association, May, 1908, reported the case of a woman forty-five years of age in whom the dominating focal symptoms were left lateral homonymous hemianopsia and hemiataxia, the latter especially in the upper extremities. There were slight hyperesthesia, hypasteroeognosis, and hemiparesis. The general symptoms were double optic neuritis, headache, occasional vertigo, nausea, and vomiting. Some mental apathy and marked depression were present. A large parietal osteoplastic flap was raised, and at the upper back part of the opening a large cyst revealed. This was emptied and the entire sac removed. The patient made a good recovery from the operation. All focal symptoms disappeared but the hemianopsia, which was gradually improving. The optic neuritis subsided slowly. It was shown that at least four symptom-complexes useful in guiding operations can be determined in cases of tumor or other lesion of the parietal lobe. The manner in which the focal symptoms and the optic neuritis cleared up after the operation was shown, as was also the importance of rapid one-step operations. The case was regarded as one of radical cure, the microscopic examination showing the cyst removed apparently of a benignant type.—*Medical Record*.

## Current Medical Literature

### Nerve Anastomosis in Infantile Paralysis.

Karl Osterhaus (*Med. Rec.*, July 11, 1908) describes a nerve anastomosis performed on a child ten years of age nearly four years after an attack of anterior poliomyelitis, there being slight right talipes equinovarus with the equinus element the more marked, strongly contracted tendo-achillis, no response to faradism over the peroneal nerve. The peronei seemed to be the only muscles paralyzed. An incision was made over the biceps tendon and the external popliteal nerve was exposed and partially divided between sutures. A longitudinal incision was also made in the nerve extending above and below the transverse incision, thus isolating a small bundle of fibres above and below. A similar procedure was gone through with on the internal popliteal, the dissection being made close to the bifurcation of the sciatic. The central segment of the internal popliteal was then sutured to the peripheral segment of the external popliteal with fine carbolized catgut, an end-to-end anastomosis being made. In the same way the central stump of the external was sutured to the peripheral stump of the internal popliteal, making a crossed transplantation. The tibialis anticus, tendo-achillis, and plantar fascia were divided subcutaneously, and the whole limb was put up in a plaster cast. Six weeks after the operation the cast was removed and an ankle brace with inside upright was substituted. There seemed to be no improvement in the function of the limb at this time, though the position was better. From this time on a strict course of electricity, baking, and massage was persisted in, with the result that at the end of four months the foot could be slightly abducted and dorsally flexed, and there was a distinct response to faradic stimulation. Continuation of the treatment enabled the child to walk without the brace and place the foot squarely on the ground, and abduction and dorsal flexion became quite forcible.

### TREATMENT OF THE ACUTE STAGE OF POLIOMYELITIS.

In the *Long Island Medical Journal* for December, 1907, Dr. Clark gives the following advice. His remarks on the treatment of the acute stage of anterior poliomyelitis are limited to a consideration of this disease in the epidemic form, such as he has just passed through. In many clinical respects the epidemic and sporadic disease are quite different. He first discusses some features of the acute febrile stage:

At the outset the child should have free purgation with calomel or castor oil. The patient should be kept at perfect rest, preferably lying on the side so that the spine will not be the most dependent part of the body; a plank back-rest in the bed will be found a great assistance in securing comfort at rest on the side. If a rapid extension of inflammation in the cord is suspected, the prone position should be adopted. Warmth may be applied over the affected part of the cord by poultices or fomentations. The old remedy of cupping, wet or dry, and the use of leeches may find some theoretical justification. The very marked relief that mustard plasters, poultices, and fomentations give to the pain renders it probable that they exert a beneficial influence in all cases. Inasmuch as the paralytic effects occur relatively late in many cases, one should try to hasten the elimination of the toxins by hot baths and packs, produce diuresis and bowel-cleansing by enterocolysis, and encourage ingestion of large quantities of hot water. The free use of water inside and out the author believes of great benefit.

In such a disease as poliomyelitis, where there is a distinct and natural tendency for the lesion to cease to spread after the first few days and then to lessen in extent, great difficulty is encountered in forming a just opinion of the effects of drugs in the acute phase. Thus, there seems little evidence at hand that such drugs as belladonna and ergot exert any influence in limiting the palsy; however, they may both be used in full doses without doing any actual harm. There can be no doubt that the physical remedies above mentioned are of much greater value than drugs; it is therefore quite apparent that the nursing care is of prime importance, both to the comfort of the little patient as well as in limiting the spread of the disease in the cord. In the general management of the case two points are of extreme importance—cleanliness and undue pressure to avoid bed-sores. If cotton-wool is not sufficient, a water-bed should be employed. That there may be no urine retention requires constant watchfulness.

All the precautions laid down here should be employed for several days beyond the acute febrile stage, as an apparent recurrence is far from unknown. This reminder is especially true in those cases in which the constitutional symptoms have been prolonged or continue after spinal symptoms occur, or in which the palsy supervenes in successive stages, as in many cases of the present epidemic. Perfect rest should be maintained for two weeks or more. The same prolonged care is necessary when there is neuritis or tenderness of the limbs. It should be remembered that where wasting is taking place some slight tenderness of the muscles and nerve is to be expected to accompany the process; it is purely secondary in nature and does not call for special treatment.

**Large Curds in Infants' Stools.**—F. B. Talbot (*Bost. Med. and Surg. Jour.*, June 11, 1908) concludes, as the result of analyses of curds in infants' stools, that the large curds are composed of some proteid (probably casein or one of its derivatives), which on coagulating entangles the milk fat in its meshes. The amount of fat in the curds depends on the amount of fat in the milk, and as this fat increases it replaces the proteid in the curd. The presence of large curds, which has

been taken by some investigators to indicate an increase of gastric hydrochloric acid, can with as great probability be interpreted as indicating a lack of this acid.

**Infant Feeding.**—F. H. Lamb (*Arch. Ped.*, June, 1908) holds that the most important thing in infant feeding is to know the exact amount of food the child receives in twenty-four hours. The only way to do this is to calculate energy quotients. He says that the percentage method is uncertain, complicated and unscientific. One should feed amounts, not percentages. Overfeeding is one of the most common causes of nutritional disturbances in children and is a distinct clinical entity. Fat is the element in cow's milk to be feared. Fat produces constipation, proteids never do. The curds in the stools are not proteid, but calcium soaps, fatty acids or fats. Casein is not difficult to digest, does not produce digestive disturbances and does not undergo putrefaction in the intestinal canal. The new born infant can digest starch. Dextrins and starches are the most valuable adjuncts to milk feeding. The volume of the food should depend on the weight of the child and never exceed thirty-six to thirty-eight ounces. The interval between feedings should never be less than three hours, and after three months four hours.

**Principal Causes of Death in Diphtheria After the Use of Serum.**—Louis Martin (*Rev. Francaise de Med. et de Chir.*, No. 11, 1908) has tabulated the causes of mortality in 853 cases of diphtheria treated at the Hospital Pasteur from 1900 to 1908. There were 83 deaths, of which 28 occurred within twenty-four hours of their entrance—that is too soon for the effect of antitoxin to be felt. This was especially the case in very young children in whom the diagnosis is very difficult. To avoid these deaths it is necessary to inject every doubtful case without waiting for the bacteriological diagnosis. Very young infants die in the proportion of about 20 per cent. They come generally from very dirty, contaminated surroundings. Preventive injection should be used in all cases of young children coming in contact with cases of diphtheria. Most of the older patients that die succumb later to toxic accidents that are generally attributed to nervous lesions; the author believes them to be the result of renal, hepatic and suprarenal incompetence. To prevent these later deaths it is necessary to reinject the patient as soon as symptoms of intoxication appear. Mixed infections are very fatal.—*Amer. Jour. of Obstet. and Dis. of Women and Children.*

**Observations on Nursing Women.**—S. Jacobus (*Arch. f. Kinderheil.*, Bd. lxxiv, H. 1 and 2), after observations on many nursing women who had given up nursing their children for some reason, not always a good one, finds that menstruation begins in many women soon after the puerperium, and in the majority of women before six months. The production of milk does not seem to be materially affected by its presence. In the clinic for infants at Berlin, where prizes are offered for the longest nursing of the children, the author has never seen a case in which it was necessary for the mother to stop nursing the child on account of the beginning of menstruation. It was also noted that when a mother has ceased nursing for an interval even as long as thirty days, it is possible for her to revive the flow of milk and to again nurse the child. Such a pro-



cedure is not injurious to the child, the secretion seeming not to have so changed as to do it any harm.

**Iodine to Reduce Size of a Scar.**—Schanz has found that the least trace of a scar is observed when a wound, healing aseptically, has a very slight irritation on the surface. Probably this is owing to the hyperemia induced by the slight irritation. He accomplishes this result in an ideal manner by painting the wound with the tincture of iodine the third or fifth day after the operation. A single application is enough for a small wound, on well nourished parts, but for larger wounds he applies the tincture every day for from two to five days. The edges of the wound under the influence of the iodine stick so close together that they heal without spreading, and the wound leaves no more trace than a needle scratch.—*A. M. A. Journal*.

**Time of Conception.**—Schaefer, in *Deutsche medizinische Wochenschrift*, August 13, 1908, reports that he had had an opportunity to examine four aborted fetuses and obtain full data as to the time of intercourse preceding the conceptions. He concludes that the views of Sigismund and Loewenhardt according to which the impregnated ovum belongs to the first missed menstrual period are probably correct. Menstruation consists of the phenomena accompanying the abortion of the unimpregnated ovum. Ovulation and impregnation probably precede the date of the first missed menstrual period by a few days; rarely they coincide with it. Spermatozoa are capable of remaining alive in the genital tract of the female during the whole period elapsing between two menstruations and thus preserve their impregnating function. A fruitful intercourse can take place at any time, but the post-menstrual period is most favorable for conception. Subjective symptoms of pregnancy may appear very soon after the impregnated ovum is embedded in the uterine mucosa. In reckoning the time of pregnancy, the type of menstruation, the beginning of the last menstruation and its character, the date of the last intercourse between the last menstrual period and the first missed period, and the appearance of subjective symptoms must be taken into consideration. In regular types of menstruation the probable time of impregnation may be obtained by the addition of the number of days intervening between menstruations minus three to the beginning of the last period.

**Severe Bleeding at the Time of Labor.**—Schickele (*Munch. med. Woch.*, May 26, 1908) says that severe bleeding at the time of labor is generally due to implantation of the placenta over the os, premature separation of the normally located placenta or to a placenta marginata. The author believes that bleeding under the placenta is rather frequent, old clots being found under it after delivery. He believes that such clots are common causes of abortion and of maldevelopment of the ovum. Loosening of the placenta seldom leads to dangerous bleeding. In case of severe bleeding it is always a question how much blood the patient has lost and how much she can lose and live. Facts that have an important bearing on this are the general nutrition and build of the patient and the condition of the heart and kidneys. Women who have borne many children within a short period, especially if they have had habitually severe bleeding, are less able to stand hemorrhages. Cases which have lost much blood before admission to the hospital have a bad prog-

nosis. The pulse is the great criterion of the patient's condition, as well as her general condition. Sometimes women who are apparently doing well have a sudden failure of the pulse. One of the best remedies is injection of saline solution by the rectum and intravenously. Cases of bleeding after rupture of the uterus bear bleeding much better than those who have placenta previa.—*Amer. Jour. of Obstetrics*, October, 1908.

**Diabetes Mellitus During Pregnancy, as an Indication for Induction of Abortion on Labor.**—A. Schottelius, Leipzig (*Muenchener Medizinische Wochenschrift*, May 5, 1908.) Fortunately diabetics rarely conceive, as pregnancy in a diabetic is of grave significance. Of nearly equal gravity is a true glycosuria beginning during gravidity. According to various authors pregnancy in diabetes reaches term in less than 50 per cent. Usually fetal death occurs during the seventh to eighth month; hydrocephalus or hydramnios is very common. Of cases already suffering from diabetes two-thirds of the mothers recovered; of those whose glycosuria began during pregnancy three-fourths survived. The commonest outcome is coma either during or immediately after labor. One-third to one-half of the fetuses are lost, and of those who survive to term the majority are weakly and die early. The mothers are very readily subject to infection; the slightest trauma may lead to gangrene. The author advises early induction of labor, by means of metureusis, as all forcible interference is contraindicated by the diabetes.

**Torsion of the Appendices Epiploicae and Its Consequences.** W. H. Briggs, Sacramento, *American Journal of the Medical Sciences*, June, 1908. The author reports 14 cases from the literature and adds one of his own. He concludes as follows:

1. Torsion of appendices epiploicae is more frequent than the paucity of references in medical literature would imply.
2. Torsion of appendices epiploicae usually occurs in persons more or less obese, during middle life and later.
3. Intra-abdominal torsion of appendices epiploicae may simulate appendicitis, hepatic colic, cholecystitis, and various other intra-abdominal diseases. Torsion of appendices epiploicae in the hernial sac may cause all the local symptoms of an acute omental or intestinal, femoral, or inguinal hernia.
4. Torsion of appendices epiploicae may result in corpora aliena adiposa, in adhesions and bands, and their consequences.
5. Corpora aliena adiposa may become infected and cause general peritonitis.
6. In the present state of our knowledge anything more than a tentative diagnosis of torsion of appendices epiploicae would be rarely possible.
7. Early operation is indicated in all cases.

**Intestinal Occlusion After Gastroenterostomy.**—Rigollot-Simonnot says that after any abdominal operation paralytic occlusion without mechanical obstacle, occlusion without by-adhesions, by bands or by extension of inflammatory lesions or of neoplasms that existed before the operation may occur. In other cases the occlusion results from the technique used in the operation. Three varieties may be distinguished; twisting of the anastomosed gut at the time of operation or later; fixation of the intestine in the mesocolic breadth of the posterior mesentery and compression of the transverse colon; prevertebral incarceration.

Pain is generally present, there is complete suppression of the stools, and of evacuations of gas, vomiting that is frequent, tenacious, and fecal with absence of meteorism. Prophylactic treatment consists in reduction of the afferent loop to the least length that is possible to complete the anastomosis; and closure of any space below the anastomosis by joining the stomach and intestine down to the root of the transverse mesocolon.—*La Tribune Medicale*, May 9, 1908.

**Analysis of the Symptoms in Forty Cases of Suppuration of the Pelvis of the Kidney.**—A. L. Chute, in the *Boston Medical and Surgical Journal*, September 17, reviews his own experience. He admits that the tabulation of a larger number of cases might give somewhat different percentage figures. He finds that of his own cases, less than one-half (42.5 per cent.) with a history of lumbar pain, or a little over one-quarter (28.5 per cent.) could he detect any enlargement of the diseased kidneys. Tenderness was present in 38.5 per cent. Casts appeared in 17.5 per cent. Eleven of the forty cases (27.5 per cent.) presented neither pain, appreciable renal mass, tenderness, or casts. The constant sign is the turbid urine. His next most frequent sign is a disturbance of micturition (85 per cent.). Both these symptoms also occur almost constantly in conditions limited to the bladder. In this particular series in 27.5 per cent. only these two signs were present. In view of the lack of distinctive symptoms in many renal suppurations and the absolute unreliability of negative findings in these cases, the vast importance of cystoscopy in the study of urinary suppurations is at once obvious.—*Medical Record*.

**Fifteen Cases of Anthrax Treated in the Philadelphia Municipal Hospital.**—Drs. B. F. Royer and E. Burvill-Holmes. *Pennsylvania Medical Journal*, September, 1908. Of the fifteen cases three died. Blood cultures were made in nine cases; the cultures were positive only in the fatal cases. In the vast majority of instances the primary pustule was on the face or neck. The authors tried various methods of treatment in their series and come to the conclusion that in certain cases the use of Sclava's serum alone is curative; in severe cases the serum should be combined with cauterization by powdered bichloride of mercury. Many cases will be cured by excision and cauterization alone.

**Acute Pancreatitis, With Report of Two Recoveries.**—Walter A. Jayne, *Colorado Medicine*, June, 1908.—Attention was first called to acute inflammatory conditions of the pancreas in 1889 by Dr. Fitz. Some ten years later, Mayo Robson gave his observations on the same subject as the result of his large surgical experience. The location of the pancreas is obscure and the difficulties of diagnosis from the symptoms alone are so great that the presence of pancreatitis is seldom determined in advance of operation or a demonstration at autopsy. The violent acute forms are not so common as to force themselves upon the watchfulness of the general practitioner. We must believe that milder forms occur with considerable frequency, and subsiding without noticeable incident, or followed, possibly, by a moderate or late induration, the true nature of the attack escaping recognition, and being

ascribed most plausibly to acute indigestion, gall-stone colic, or, if prolonged, to gastritis.

Two cases are reported. In the first the symptoms resembled acute obstruction of the bowels or a perforating ulcer of the stomach. The pain was relieved after the bowels were moved but returned later, with fever, a high leucocyte count and a definite mass in the region of the head of the pancreas. At operation, distinct areas of fat necrosis were found. A large mass was discovered which contained pus. This was opened and drained. Eventually the patient recovered. The second patient presented many similar symptoms, a firm flattened mass being felt at the location of the head of the pancreas. At the end of six weeks she recovered without operation. In regard to diagnosis, the author quotes from Mayo Robson and Fitz. The former says that although pancreatitis is without pathognomonic signs, the diagnosis can usually be arrived at by a careful study of the history, mode of onset and the combination of symptoms and signs. The latter says that acute pancreatitis is to be suspected when a previously healthy person or a sufferer from occasional attacks of indigestion is suddenly seized with a violent pain in the epigastrium, followed by nausea and vomiting and, later, the appearance of a circumscribed mass.—*Amer. Jour. of Surgery*, Aug., 1908.

#### **Some Clinical Features of Pancreatitis.**

Dr. John H. Musser, of Philadelphia, at the annual meeting of the Association of American Physicians, Washington, D. C., May 13, 1908, gave some interesting results of the studies of nine cases of acute pancreatitis. In one case an early expression of carcinoma of the pancreas might be seen in an attack of acute pancreatitis. This patient was fifty-six years old, and he had definite symptoms of acute pancreatitis. These acute symptoms subsided at the end of three or four weeks and then the phenomena of carcinoma of the pancreas first arose. The primary focus was in the breast. In another case an acute pancreatitis with the occurrence of hemorrhage caused sudden death in the course of typhoid fever. The autopsy in this case showed a severe hemorrhage from the pancreas. In another case there were symptoms of a renal calculus occurring at the same time with symptoms of acute pancreatitis. Notwithstanding the complication and the disagreeable features in this case they had the temerity to advise operation. They found quite a large collection of fluid in the layers of the omental cavity hemorrhagic in nature. This was the first case ever diagnosed in Philadelphia. The patient died of peritonitis. Patients might recover from acute pancreatitis. The diagnosis of pancreatitis must be based upon the previous history, the acute symptoms, the symptoms of inflammation behind the stomach, and by the abdominal symptoms, with which all were familiar. In two of the nine cases, the patients were treated for diarrhea. An acute anemia was characteristic in five out of nine cases. A subnormal temperature occurred in five cases, occurring in from one to five days after the onset of the disease. Then a gradual rise took place. Dyspnea occurred in eight out of the nine. There was an increased pulse rate in all the cases. The Cambridge test was positive in all the cases.—*Medical Record*, Aug. 8, 1908.



### Treatment of Hemorrhage After Operations on the Nose, Naso-pharynx, and Tonsils.—

Oscar Wilkinson, Washington, D. C., in the *Journal of Ophthalmology and Oto-Laryngology*, June, 1908, says: Slight bleeding can usually be controlled by adrenalin, or by hydrogen peroxid applied on a small, firm, moist cotton swab. Clots should be removed and the nose cleaned and dried as thoroughly as possible, first. Nitrate of silver, 30-40 per cent., may act well when other styptics fail. If a bleeding point can be detected, the use of the cautery is indicated. If not promptly controlled by these measures, the nose should be packed with strips of gauze. In hemorrhage from the naso-pharynx, as it may be observed after operative removal of adenoids, styptics, such as tannin and antipyrin are of service, but it may be necessary to tampon the posterior nares. If a Bellocq's canula is not at hand a shot may be attached to a strong silk thread, dropped through the nose into the naso-pharynx, and drawn out through the mouth with a pair of forceps. A large plug of gauze saturated in tannin and antipyrin is now attached and drawn back so as to cause compression in the bleeding area. Post-operative tonsillar hemorrhage, unless severe, usually yields to ice water gargles. Styptics, especially preparations of iron, obscure the field and are unreliable, but strong solutions of silver nitrate (30-60 per cent.), tannin-glycerin, or tanno-gallic acid, act well. A single point may be touched with the

cautery. Digital or instrumental compression with some form of clamp is effectual, but may cause reflex gagging and vomiting, and not be tolerated. Surgical treatment consists in the twisting of the arterial twig, ligation of the tonsillar stump, tying a purse-string suture about the stump, or in total excision of the stump, packing the tonsillar cavity and closing it up by sewing the anterior and posterior pillars together. Wilkinson has devised a curved needle for rapid placing of the stitches. Ligation of external or common carotid is hardly justifiable, and, what is more, is not always efficacious. The most valuable internal remedy is undoubtedly opium, both for its action on the circulation and for relief of pain and anxiety. The effect of ergot is doubtful, as is that of adrenalin. Stimulants are contra-indicated, unless the patient has fainted from loss of blood, and hemorrhage continues after he has regained consciousness. Any constriction about the neck, such as a tight collar, should be removed, the patient should take deep inspirations, and should sit up, not lie down. Tonsillar operations on adults should be undertaken with caution, lactate of calcium used internally in 20-30 grain doses, several times daily in case of any tendency of hemophilia, preference given to snaring or crushing over cutting procedures, and the patients kept under observation for some time after operation. Tonsillectomy should not be performed immediately before, during, or after menstruation.

### Ischochymia Simulating Gall Stone Disease.

Dr. Max Einhorn, New York City, in the *American Journal of Surgery* for June, in an article with the above title, gives the following differential diagnostic table:

	<i>Benign Ischochymia.</i>	<i>Gallstone Disease.</i>
1. Attack.	Attack does not come abrupt, it usually lasts a week or more.	Attack comes suddenly and ends abruptly.
2. Pain.	Pain in upper abdomen, diffuse, intense, but frequently endurable without the use of morphin.	Pain in upper abdomen usually more to right side over liver and radiating to right shoulder, very intense, frequently necessitating relief by morphin.
3. Vomiting.	Vomiting of large quantities of food, containing usually food from day previous.	Vomiting not usually present; if present, contains last meal, but no food from day before.
4. Influence of vomiting on condition of patient.	Vomiting brings relief; pain sometimes ceases after it.	Vomiting usually is without much influence on the attack.
5. Condition of stomach.	Stomach usually much dilated; peristaltic restlessness at times visible.	Stomach usually not especially dilated. Gastric peristalsis not visible.
6. Results of stomach examination.	Examination of stomach contents in the fasting condition shows presence of food remnants from day previous.	Examination of stomach in fasting condition shows that the organ is empty or contains only a small amount of gastric juice with or without bile.
7. Condition of liver.	Liver not enlarged.	Liver usually enlarged, both upward and downward.
8. Icterus.	Icterus not found.	Icterus present at times.
9. Fever.	Usually absent.	Usually present.
10. Sex.	More frequent in men.	More frequent in women.

## NORTHWESTERN UNIVERSITY MEDICAL SCHOOL. CHICAGO, ILL.

QUARTERLY BULLETIN, SEPTEMBER, 1908.

**Error in Examination of Sputum for tubercle bacilli.**—Dr. Buhlig points out that in the attempt to hurry a preparation of sputum for microscopic investigation, the smear is often heated before it is quite dry, producing in this way artefacts that are sometimes with difficulty differentiated from tubercle bacillus.

**A Report of some Red Blood Counts in Male Medical Students, by Drs. Neal and Buhlig.**—Investigation made in young adults shows that the red cell count is distinctly above the average, 5,000,000, as usually accepted, and that the variations are large. This fact is of value in the proper interpretation of the significance of the total count.

**A Point in the Use of the Tallquist Scale for Hemoglobin Estimations.**—Dr. Buhlig presents some comparisons of the readings of different sized drops of blood on the Tallquist scale with the results from the same patient on the Dare instrument. Taking a drop of blood of the size of the perforation in the color scale, the readings were practically always low, taking the Dare as a standard. When a spot of twice that size was read, the results obtained agreed very closely with those from the Dare.

**Vaso-Cellular Carcinoma of the Scalp and Skull.**—Dr. Chas. H. Fox reports a case from the clinic of Prof. W. E. Schroeder. A piece of the skull 10.5x11.25 Cn. in size was removed by means of chisel and mallet, and the defect was filled in by a dense C. T. that held the brain so firmly that the normal convexity was lost and the exposed area flattened. The motor centres for the leg, arm and face were all found located anterior to the fissure of Rolando. This was also found to be the case in five subsequent cases in which the brain was exposed.

A discussion of the various methods of opening the skull follows, and attention is called to the use of the chisel and mallet, particularly on the ground of availability and simplicity. The author believes, after some experience with electrical instruments for this purpose, that ultimately they will be ideal, but that at present there are some difficulties to be overcome.

In regard to the closure of defects in the skull it is stated that this should not be done unless for some sound indication as no case is reported in literature where a fatality resulted from the presence of such a defect and frequently a dense, fibrous tissue fills in the defect.

Experimental work done on twelve dogs gave the following conclusions:

1. Connective tissue plays a very important part in the repair of defects of the skull;
2. There may or may not be bony union, but if there is not the C. T. union is firm enough for practical purposes;
3. Old bone or bone stripped of its periosteum acts merely as a foreign body and has little to do with closure of the defect;
4. It is important to have the skin wound and bone incision apart from each other on account of the possibility of a skin infection causing a meningitis.

## Obituaries

D. M. STOUT, M. D.

**STOUT.**—As previously announced in the Journal, Dr. Daniel M. Stout, of Berlin, Camden County, died at his home in Berlin, July 10, 1908, after a week's illness. The following action was taken by the Camden County Medical Society, of which he was the oldest member:

Since it was the will of Almighty God to take from our midst Dr. Daniel M. Stout, the most venerable member of this body, be it resolved that these words indicative of our sorrow and respect, be added to the records of this society:

He was the first to be joined to the membership of the Camden County Medical Society by election. This occurred in 1847, over sixty years ago. From that day until his death, his relationship to that organization has been marked by unswerving loyalty.

The steady growth of his ability as a physician, the dignity and power of his individuality, caused him to be made president in 1897.

His community knew him as a citizen of spotless integrity, the church as a consistent and faithful member, his family as a loving husband and indulgent father, whose strong heart was ever ready to succor them in every need. The medical profession grew to know him as a physician whose dominant characteristics were unflinching courage and absolute faithfulness to his calling.

His death will cause the passing of a medical and social landmark from Camden County.

Therefore, while it is with deep sorrow that we frame these resolutions, the poignancy of our grief is lessened by the knowledge that his eighty-two years were filled with thoughts and deeds that make the fullness of a life well spent.

Be it also resolved, That our heartfelt sympathy be extended to his family, together with a copy of these resolutions.

C. K. DAVIDSON, M. D.

**DAVIDSON.**—Dr. C. K. Davidson died at Stanhope, Sussex County, N. J., August 18, 1908. He was born near Harmony, Warren County, August 27, 1846. After receiving preparatory education he entered the Medical Department of the University of Michigan, at Ann Arbor, where he graduated in 1868. From 1868 to 1873 Dr. Davidson was associated with Dr. John Miller, in medical practice at Andover, N. J. During the latter year he moved to East Newark and practiced there for nearly a year. In the fall of 1874 he located in Stanhope and there built up a large practice, winning the esteem and confidence of the community by untiring devotion to his profession, by his kindness of disposition and urbanity of manner. He continued in active work until about four years ago, when he passed through a long siege of grippe for twenty weeks, which practically disabled him for the rest of his life. Since then, while able to go about to some extent, he was for the greater part of the time a "shut-in."

He faced death with the same courage and serenity he had so long displayed in sickness; he had the Christian's faith and hope—not only willing to go, but glad to depart and be in his Father's House. Thus ended the earthly career of a good man, an able physician, a true citizen, a loving brother and a faithful and devoted husband. One of his brothers is the Rev. John C. Davidson, a missionary in Japan, and a sister is



the wife of the Rev. Julius Soper, also a missionary in the same country. He was an active member of the Sussex County Medical Society till the past few years, when unable to attend its meetings, he was elected an honorary member. He was also a member of the Masonic lodge of Stanhope.

WEST.—At Jersey City, N. J., on October 14, Dr. John Eberle West, of dilatation of the heart, aged 65 years. Dr. West was graduated from the Ohio Medical College in 1867, and had practiced for forty years. He was president of the Hudson County, New Jersey, Board of Health and Vital Statistics, and a member of the Board of Pensioners.

### BOOK REVIEWS.

GENITO-URINARY DISEASES AND SYPHILIS, by Edgar G. Ballenger, M. D., lecturer on Genito-Urinary Diseases, etc., Atlanta School of Medicine. Eighty-six illustrations, 276 pages, \$2.00. E. A. Allen & Co., Atlanta, Ga.

This little book is a practical and concise compend for the use of students and practitioners desiring condensed information on the salient features of these subjects.

"THE CAMPAIGN AGAINST TUBERCULOSIS IN THE UNITED STATES," compiled under the direction of The National Association for the Study and Prevention of Tuberculosis, by Philip P. Jacobs, with an Introduction by Livingston Farrand. Charities Publication Committee, 105 East 22d Street, New York, 467 pages. Price \$1.00, postpaid. Issued September, 1908.

This is the first of a series of books to be published by the Charities Publication Committee, acting for the Russell Sage Foundation for the Improvement of Social Conditions. It is a descriptive directory of the institutions dealing with tuberculosis in the United States (state and municipal), and also tables and chart showing the growth of the anti-tuberculosis movement, and a full index. It is a valuable book of reference and is sold at actual cost.

### BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

#### Statement of Mortality—September, 1908.

The total number of deaths reported to the Bureau of Vital Statistics for the month ending September 15, 1908, was 3,464. The deaths from communicable diseases were less than the corresponding period last year. The deaths from rabies (included in all other diseases) shows an alarming increase and steps should be taken at once by the governing bodies of all municipalities for the suppression of this disease. When the muzzling of dogs is suggested, however, the owners of dogs are up in arms, using their influence to prevent the enactment of a dog muzzling law, on the ground of alleged cruelty. A dog will, of course, resent the presence of a muzzle until he becomes accustomed to it, precisely as a horse resents the presence of harness on his body and a bit in his mouth, until he has learned to wear them as quietly as most horses do the world over. In some portions of Europe dogs are required to wear muzzles when they are not otherwise restrained from biting, and they do so as naturally and quietly as horses wear

harness. There is no record showing the number of persons recently bitten by dogs, however there were four deaths reported to this department during the month ending September 15, as having been due to rabies.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending September 15, 1908, compared with the average for the previous twelve months; the year's monthly average for the various diseases are given in brackets:

Typhoid fever, 45 (36); measles, 9 (14); scarlet fever, 7 (34); whooping cough, 38 (20); diphtheria, 23 (48); malarial fever, 3 (3); tuberculosis of lungs, 272 (298); tuberculosis of other organs, 59 (50); cancer, 134 (124); cerebro-spinal meningitis, 26 (30); diseases of nervous system, 385 (359); diseases of circulatory system, 315 (314); diseases of respiratory system, pneumonia and tuberculosis excepted, 112 (178); pneumonia, 103 (250); infantile diarrhoea, 699 (222); diseases of digestive system, infantile diarrhoea excepted, 278 (198); Bright's disease, 183 (206); suicide, 35 (37); All other diseases or causes of death, 738 (602); total, 3,464 (3,024).

(The following are worthy of special notice: The decrease in number of deaths from diphtheria, tuberculosis, pneumonia and other diseases of the respiratory system; and the increase in number of typhoid fever, whooping cough, cancer, diseases of nervous system and infantile diarrhoea, due allowance being made for the season of year, in pneumonia especially.—*Editor.*)

#### Laboratory of Hygiene, Division of Food and Drugs.

During the month ending September 30, 1908, 607 samples of food and drugs were examined in the State Laboratory of Hygiene. Those found below the standard we note the following: Twenty-eight of the 242 samples of milk, 1 of the 15 of cream, 5 of the 17 of ground cloves, 3 of the 14 of honey, 3 of the 10 of ground mustard, 9 of the 40 of cider vinegar, 18 of the 23 of chloride of lime, 8 of the 11 of lime water, and 3 of the 4 of tincture of opium. The following are the leading ones up to or above the standard: Allspice, chocolate, cocoa, flour, ginger, alcohol, cream tartar, and witch hazel. Of kerosene 2 of the 20 samples were below the standard.

Sixty-five inspections were made in forty-three cities and towns during the month.

Specimens for bacteriological diagnosis: From suspected cases of diphtheria, 163; tuberculosis, 322; typhoid fever, 271; malaria, 31; miscellaneous, 13.

#### Division of Sewerage and Water Supplies.

Total number of samples analyzed in the laboratory, 117, as follows: Public water supplies, 44; private wells, 45; dairy wells, 5; creamery supplies, 11; miscellaneous, 5; sewage samples, 7.

#### Inspections.

Private supplies inspected at Riverton, Englewood, Salem. Public supplies inspected at Highlands, South River, Bound Brook, Salem. Stream inspection: Delaware River at Lambertville, Rockaway River at Dover and Rockaway, Cohansey River at Bridgeton, Shrewsbury River at Highlands, Alloway Creek at Salem. Inspection of sewage systems at Garwood, Loch Arbor, Burlington, Allenhurst, New Milford, State Hospital at Trenton. Number of persons summoned before the board, 185.

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## THE PSYCHIC ELEMENT IN MEDICAL PRACTICE.\*

By Linn Emerson, M. D., Orange, N. J.

I was induced to write this short paper by the following review of Quackenbos's *Hypnotic Therapeutics*, which appeared in the *Literary Digest*.

The wave of mental healing that is spreading over the modern world has substantial reinforcement in this book of Dr. Quackenbos's. The author, who has been long and favorably known in literary and educational circles, gives a mass of facts derived from his own experience and interpreted according to scientific standards. The nature of suggestion and the different types of suggestibility are discussed in the light of recent psychological investigation. Mental science, Christian science, metaphysical healing, faith and prayer cures, osteopathy, and other misunderstood and often misused methods are shown to have a common explanation in auto-suggestion.

The dangers and limitations of all such methods are pointed out, and it is urged that the truth they contain amidst much falsehood, should be appropriated and utilized by scientifically qualified practitioners. These Dr. Quackenbos would limit to the medical profession, except in the case of mental and moral disorders, where competently trained psychologists may do a legitimate work.

There is no doubt that here the author does a real service, at a time when there is danger that such methods may become

vastly popularized under the sanction of the various religious organizations. Any minister who is thinking of taking up such work from whatever motive, would do well to read this book and heed its counsels of caution. Few books have greater interest as records of personal experience. The author says he has himself treated seven thousand cases, comprising functional errors in digestion; metabolism; circulation; menstrual disorders; nervous disturbances—as hysteria, epilepsy, chorea, occupation neuroses, habit spasms, speech defects, and neurasthenia with its delusions, morbid fears, and imperative conceptions; drink, tobacco, and other drug habits; mental troubles; insomnia; homesickness; obsessions; irresistible impulses; dementia præcox, and incipient insanity, etc., etc. Many descriptions of cures along the above lines are given by Dr. Quackenbos which, taken at their face value, are astonishing.

To an unbiased reader of this book the question comes again and again, how can these things be possible and the mass of reputable physicians and other intelligent people yet remain absolutely indifferent to their significance? Such books, whatever else they may do, challenge alike intelligence and honesty. If they record the truth then are most of us grossly and harmfully ignorant. If they do not record the truth, then are their authors the cruelest of liars. Is there not some way by which society may know whether we are a generation of fools, or are the victims of a new breed of the most conscienceless impostors? This is no reflection upon Dr. Quackenbos's book. It is simply to assert that such books raise the greatest and most significant of issues, quite independent of the passing interest their publication may excite.

\* Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 19, 1908.



The reviewer is no doubt correct in some measure that most of us are grossly and harmfully ignorant, not only on the subject of psychology, but on all the sciences which at best can be said to be but in their infancy. The science of medicine has but recently emerged from the ignorance and superstition of the dark ages. In early times it was but the handmaiden of priestcraft. With the recent advances in therapeutics, surgery, pathology, and bacteriology there seems to have been an effort on the part of the practitioner to bring medical practice nearer an exact science than formerly, with the result that many have lost sight of the fact that medicine is as much an art as a science.

In the endeavor to diagnose and treat the disease, with greater exactitude the treatment of the patient and the patient's family and friends is often overlooked or neglected. There has always been associated with the healing art a certain mysticism. Modern tendencies are to eliminate this force and one who takes advantage of it to too great a degree is open to the charge of quackery.

The unprincipled quack by the very emphasis of pretended knowledge and promises of cure often brings about a restoration of health where the more skillful but more conscientious practitioner has failed. This is the secret of the success of so many of the irregular systems of healing, and of the irregular members of our own profession. If the ignorant irregular can bring about so many cures by these methods how much more should be accomplished by the scientific, careful, conscientious man.

Many physicians refuse to avail themselves of these means at their disposal, having no desire to be designated either quacks or liars. Verily, the truth is not to be spoken at all times and the successful physician must sometimes be a most skillful prevaricator. A promise to benefit or cure made in all hope and sincerity may eventuate a falsehood, but not necessarily a lie. Many practitioners who are taking advantage of mental therapeutics and getting wonderful results thereby, are doing it unconsciously.

Every specialist in the land is using psychic methods to a large degree, whether he is aware of it or not. The fact of having consulted a specialist is often sufficient to bring about a cure even though the treatment may be identical with that given by the family doctor. The results accomplished by electro-therapeutic measures, massage, vibrators, fitting of glasses, gynecological tinkering, or even by some operations are

as much due to psychic as to material methods.

Bishop Berkeley cured thousands with tar water, and the demand for Perkins tractors was so great that they could not be made fast enough of metal, so were later made of wood, and possessed equal therapeutic efficacy.

The success of Christian science and mental healing is undeniable and the neglect of this phase of the healing art on our part is in some measure responsible for their existence. As a result of our materialistic tendencies in the past few decades we are now in the midst of a wave of enthusiasm for psychic methods of treatment, and the perusal of the books of Scofield, Du Bois and Quackenbos would almost lead one to forget all else but psychic methods of treatment and say with the reviewer, "If they do not record the truth, then their authors are the cruelest of liars."

The wide variance in opinions on psychic methods of treatment is due, as in all other differences of opinion, to difference in the point of view. When the Supreme Court of the United States in setting forth a certain ruling is divided five to four on the subject it is not customary to designate those in the minority either as knaves or fools, and it would seem that our profession is entitled to as much consideration.

While there is room for wide differences of opinion as to the exact amount of consideration the psychic element in medical practice should receive, there is little doubt in the mind of the writer that it has received too little consideration in the past and is in danger of receiving too much in the immediate future.

Our salvation in the matter would seem to be higher educational requirements for admission to our ranks, and a more careful study of psychic phenomena by all members of our profession.

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## DISCUSSION.

Dr. T. N. Gray, of East Orange, opened the discussion on this paper. He said that the present day psychic therapeutics is but a change in technique, in the use of the personal equation in the relation of physician to patient. Early medicine was almost entirely psychic, in a crude way. Medicinal means being used only after the patient had been duly impressed by incantations and in many instances, by grotesque gymnastics. The priest was physician, and in our own country the medicine man of the Indians was a pastmaster in the use of the psychic influence. As the knowledge of the physiology of the body advanced, the knowledge of the physiological action of drugs also advanced and

medicine took a more prominent place in the armamentarium. Still further advancement along physiological lines, and with its newer knowledge of pathology, and the still newer bacteriological knowledge, medicine rose higher and higher in position and use, to this, the day of oporonic index and serums, but through all this advancement there remained the ego of the physician, and the degree with which this can be impressed on the patient has much to do with the success or non-success of the physician. It has remained for the specialist in psychiatry to separate this element from the use of medicine more and more, and to bring its use to the present day position. This element in the practice of medicine being confined to use almost entirely in those conditions functional only, or self-induced. The opportunity for romancing in recounting its efficacy is abundant, and to those living a life of ordinary ego, it seems that the superlatively developed ego does so. The average practitioner in dealing with the average patient can use this element only in connection with a statement calculated to convince through the truth of the statement or through the power of the physician to carry home the conviction of truth, and the average physician finds that his ego is the more potent as he uses it exclusively in connection with the truth. Undoubtedly there are minds which can be influenced by the charlatan or quack, but the truth of the statements made, is in the fact, that for every quack, charlatan or ist, there are hundreds of general practitioners earning a living, and incidentally, keeping the confidence of their patients. It would seem that when a man using the psychic element exclusively, has to resort to paraldehyde, chloral, or the bromides to induce the ascendancy of the subnormal over the normal consciousness, or whatever the condition may be that to a degree he stultifies himself. In conclusion, let those of us who, fortunately or unfortunately, do not possess the superlative ego necessary to apply the psychic treatment to the degree that some claim they can, take courage and continue to do the best in our power for our patients, making that best worth more and more by study, and by calling from theorist, specialist or psychist, coming with all we gain in knowledge, that amount of personality which we possess and which gains for us that confidence of our patients which is of benefit to us, as it proportionately enables us to better buoy them up in time of stress.

Dr. W. M. Leszynsky, of New York, said that the discussion upon a subject of this magnitude and engrossing interest should be more intellectual than emotional. Many members of the medical profession have an inadequate or erroneous conception of the prevailing views as to the present psychotherapeutic agitation. Again, others have given no attention at all or it is the recipient of a broadside or adverse criticism or unjust condemnation.

On the other hand, there is an increasing majority who deem it worthy of careful consideration and analysis. The viewpoints of the layman and the neurologist upon this all absorbing topic of the day are essentially different and more or less antagonistic.

Psychotherapy should not be characterized as a method confined to special forms of psychological analysis, persuasion, and hypnotic suggestion to the subconscious mind. Within its

sphere we must include isolation, educational measures, physical, moral and intellectual, healthful occupation and diversion, encouragement, etc. An idea may be pathogenic or therapeutic according to circumstances. It may prove beneficial or malign. One does not always realize the immediate or remote effect upon the patient of some inadvertent or discouraging remark. Many susceptible and sensitive people are thus unfavorably influenced, and their subsequent brooding is not satisfactorily neutralized by the accompanying prescription. The man who, without discrimination, thoughtlessly tells his patient there is no hope for him, is not a desirable representative of intelligent psychotherapy. Special methods of psychotherapy in nervous diseases, such as the re-education method of Du Bois, Freud's analytic method and hypnotic suggestion, all have their limited fields of usefulness.

But, psychotherapy alone, in the vast majority of instances, cannot successfully supplant a rational plan of modern medical treatment adapted to the individual, and based upon regulation of habits and occupations, hydrotherapy, physical exercise, the judicious use of drugs, etc., in conjunction with moral management through suggestion, and persuasion and educational and disciplinary measures.

As an adjuvant to customary forms of treatment, unsystematized psychotherapy is unconsciously or deliberately utilized by all physicians in their daily work. But its practice as an exclusive method presupposes special skill and training, and is applicable only in selected cases of hysteria, impulsive ideas, obsessions, hypochondriasis, etc. It requires much time, patience and perseverance, and its successful utilization depends in a large measure upon the personal influence of the physician and the receptivity, intelligence, credulity and faith of the patient. It is more effective and permanent in its result under radical change of environment.

However, psychotherapy is by no means a panacea in the psychoneuroses, its usefulness being limited. The recent wave of public opinion fostered by a superabundance of psychotherapeutic literature, ranging from that based upon sound psychological principles to that blatant self-advertising, has naturally resulted in over-estimation and exaggeration of its importance. Many of those present have no doubt heard of the psychotherapeutic clinic recently inaugurated by the Emmanuel Church in Boston. It is announced by those in authority that no patients are treated without a preliminary examination by a physician. Similar schemes are also being developed with great enthusiasm by religious organizations elsewhere, and the cyclone has also struck New York City.

In an overzealous and apparently irrepressible activity in this direction, the mere element of preliminary diagnosis will very soon be ignored to the detriment of the patient and the ridicule of the medical profession.

Should the practice of psychotherapy be left to the churches unrestricted, and fall into the hands of ignorant religious pretenders, without adequate protest, it would, in my opinion, ultimately prove a public calamity, simply degenerating into a dangerous offshoot of so-called Christian Science without its absurd fundamental principles. In its popularization, we must take into serious consideration the danger of neglect of



accurate diagnosis and the study of the patient's physical condition. The medical profession and the public will, in due time, realize that attempts at the indiscriminate use of exclusive psychotherapy by untrained operators will inevitably result in a rapid increase in the ranks of the psychopaths. The time is ripe for some concerted action in regard to this matter.

Whatever form of medical treatment is instituted, be it psychological, physical or medicinal, it is the prerogative of the educated and specially trained physician and should not be relegated to others.

**Dr. Charles A. Rosenwasser, of Newark,** said that he was very glad to have heard a paper on the question of psychic treatment, as he thought it time that a warning should be sounded. When one picks up a book and reads that cancer can be cured by psychic treatment or that it may develop through the workings of the subconscious mind, or that a mother may overcome constipation in her child by sitting down at the bedside and suggesting to the sleeping child that its bowels will move in the morning, he thought it time that the medical profession should take notice of such statements and take steps to bring the matter before the public in its true light.

That psychic treatment has an important place in the treatment of many nervous and mental disorders there is no doubt, but it is also true that such treatment may easily be overdone. He thought that the book upon the subject written by Dr. Quackenbos should be severely criticised. Its author had made a statement that he had personally treated eight hundred cases of drink habit, that he had been able to keep this number of patients under observation for a period of from six months to six years, and that using in most cases only one or two treatments he had obtained cures in from seventy-five to eighty per cent. of his cases.

Dr. Rosenwasser asked those present to try to communicate with fifty patients that they had treated in the last two years, and see how many answers they would receive. When Dr. Quackenbos states that he has had this number of cases under control for six or eight years Dr. Rosenwasser thought that the statement did not ring true. He wished Dr. Quackenbos were present, as he (Dr. Rosenwasser) did not wish to blame these remarks upon his subconscious mind.

Consciousness can, generally speaking, be divided into three stages, that of consciousness, subconsciousness and unconsciousness. Dr. Rosenwasser said that he believes we can by suggestion, influence a person who is conscious and one who is subconscious, but not one who is unconscious.

**Dr. William G. Schauffler, of Lakewood,** thought that one should be careful to avoid extremes. Such books as the writer of the paper had referred to, Dr. Schauffler said are interesting to a careful, thinking man; but they are dangerous for the general public. This book had been put into his hands by one of his most neurotic patients, who had asked him whether he did not think this method of treatment would cure her. He talked to her, and succeeded in convincing her that other methods would do her more good. Dr. Leszynsky, in his discussion, had referred to the Emmanuel Church work in Boston. Dr. Schauffler said that the previous

week he had spent several days in that city, and had made careful inquiries regarding this work, of the men most interested in promoting it. Dr. Schauffler had been told by a well-known Boston neurologist that in the beginning he had taken great interest and pleasure in sending patients to the Emmanuel clinic, because he felt that the work was conscientiously done. During the last few months, however, he and others had given up sending patients there; as the work had so overwhelmed the men in charge that they are now picking out only the most favorable cases for treatment. They are turning away seventeen out of every twenty patients. In regard to alcoholics, Dr. Schauffler was told that they will promise to cure only those who promise to abstain absolutely from the use of liquor, and say that they have the power so to abstain. The clinic will not take every alcoholic and try to cure him, but only those who can stop drinking of themselves. Therefore, it is no wonder that they get ninety per cent. of cures. Dr. Schauffler said that he had mentioned this because the profession in New Jersey is not without interest in these movements. Their results, however, must be taken with the greatest caution; and, as thinking men, the members of the Society should be extremely careful, in their conversations with their patients and the general public, not to give the weight of their authority to movements that start well, but degenerate before getting very far.

**Dr. Thomas P. Prout, of Summit,** said it seemed to him that the most important thing in regard to this matter would be for the physicians to try to understand the phenomena. He had been asked, hundreds of times in the last year, by the laity, "What do you think of such and such a movement?" and he had found that the laity, as a rule, expect the physician to scoff and jeer when these things are mentioned. He thought that looking at such things in a derisive way when in the presence of the laity would carry no weight at all; and that to throw mud at those that practice these methods would merely result in encircling them with a sort of halo of martyrdom and would be of no use, unless one could show that such methods do positive harm. He thought that the profession should try to understand these things, so as to mold public opinion.

He was very glad that Dr. Emerson had brought this topic before the Society, because he considered it very timely. When one considers the number of these various movements, of one kind and another, religious and non-religious, all over the country, it is apparent that one cannot talk and think too much about these matters. He believed that the physician is in a position to do a great deal of good in this respect; that he certainly had, by his inattention to this matter, aided and abetted more or less those practicing these methods, through his lack of understanding.

**Dr. H. C. Neer, of Park Ridge,** said that it is undoubtedly true that such methods do a great deal of good; as it is not likely that all the persons that claim that they are cured are lying. He knew from his own experience that there is a good deal of truth in it. He could tell some things that had occurred in his own practice that would illustrate the good that has been done through the power of hypnotism, although many would probably not believe them. He thought that after a time the method would find its

right place, as almost all new things meet with opposition at first. This method is meeting honest opposition now, but at the same time he considered that there is a good deal of honest truth and good in it. He admitted, however, that it ought to be properly regulated, the same as any other practice of medicine. He did not think that these people should be allowed to practice indiscriminately, any more than any other species of irregular practitioner. He thought that the medical profession should become educated in that line of work, and that the people should also become educated in it. When the medical profession had taken hold of the subject and studied it, as they ought to, it will find its proper place and become just as useful as many other methods, that have been at first, as this is now, stamped as valueless.

Dr. Emerson, closing, said that the specialist and the enthusiast are always prone to overestimate the results in such cases. Drs. Quackenbos, Scofield and DuBois are all members of the medical profession, but are prejudiced in their statements. It is just like the fight between the oculists and the neurologists, which has been going on for years, the oculists insisting that ninety-five per cent. of all headaches are due to eye-strain (a condition that Dr. Emerson thought there was no doubt that the neurologists had neglected), in a careful perusal of the books of these men, he had failed to find in them a single mention of the fact that headache or nervous trouble may be due to any ocular defect. When a man claiming to practice medicine and to be a neurologist goes to the extreme of ignoring such a source of trouble as that, of whose presence there can be no question, Dr. Emerson thought that one should look at the statement of these men in regard to mental therapeutics, and take it with a grain of salt. They are, he thought, overstating the case; and their statements should not be taken in their entirety.

## ACUTE PERFORATING GASTRIC AND DUODENAL ULCER.\*

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(Continued from the November Number.)

One of the most interesting questions in connection with the treatment of perforating ulcer of the stomach or duodenum is the question of a simultaneous gastro-enterostomy or of jejunostomy, the latter being advocated especially by Von Eiselsberg. That certain conditions render simultaneous gastro-enterostomy imperative is granted by all. After appropriate treatment of the perforation this operation is doubtless indicated where the closure of the perforation has unduly narrowed the pylorus or duodenum. Furthermore, it is

also urgently indicated where the perforation has occurred in a stomach where the pylorus or duodenum is already the site of stenosis from the cicatricial contraction of an ulcer of long duration. In all other cases gastro-enterostomy must be a matter of individual choice, and its advisability can only be definitely settled by the comparison of a large number of cases and their end results in which the perforation has been treated by closure or excision only with an equally large number in which a gastro-enterostomy has been added. In support of a gastro-enterostomy, the following possible advantages may be cited:

(a) That by preventing undue tension on the closed perforation, the danger of an immediate recurrence of a perforation is avoided; (b) that the danger of perforation of additional ulcers in the stomach or duodenum is thereby prevented; (c) that it serves to prevent hemorrhage from other ulcers than the one in which perforation has taken place; (d) that it hastens the healing of all coexisting ulcers in the pyloric zone of the stomach and in the adjacent duodenum. (e) In addition, Paterson states that gastro-enterostomy promotes recovery in those patients in which the perforation is in an inaccessible part of the stomach, as in the vicinity of the cardia, and which therefore cannot be treated by suture, and cites such a case in which recovery followed this method of treatment. (*Lancet*, 1906, Vol. 1, p. 575.)

On the other hand, the opponents of a gastro-enterostomy as a routine measure, at the time of the closure of the perforation assert:

(a) That it prolongs an operation of emergency and thereby unnecessarily jeopardizes the chances of recovery; (b) that it may serve as a means of carrying infectious material to a part of the peritoneum hitherto uninvolved; (c) that it does not necessarily prevent secondary perforation and that it subjects the patient to the risk of a perforation at the point of anastomosis; (c) that it does not necessarily prevent hemorrhage from other ulcers; (e) that it does not always hasten or insure the healing of coexisting ulcers; (f) that the subsequent history of patients in whom the perforation was treated by closure only has been generally one of complete relief from all previous gastric symptoms, and that in those cases in which the gastric symptoms either persist or recur, a secondary gastro-enterostomy for their relief can be done more safely than at the time of perforation.

\* Read before the New Jersey State Medical Society, Cape May, June 19th, 1908.



The actual value of these different arguments in support or in opposition to the addition of a gastro-enterostomy to the simple closure of a perforation can only be determined by the consideration of a large number of cases, which unfortunately a careful search of the literature does not supply. The writer has been able to collect only thirty-four published cases treated in this way, and through the kindness of the members of the American Surgical Association and of other personal friends in New York, seventeen additional unpublished cases in which this plan of treatment was carried out. Of the thirty-four published cases of which brief abstracts follow, and in most of which operation was done within thirty-six hours after the perforation had taken place, there were twenty-three recoveries and eleven deaths. Of the seventeen cases above referred to, seven died. Of eighty-two cases furnished by the same surgeons, in which the perforation had been treated by closure, only twenty-eight, or about one-third, died. In none of these published or unpublished cases is there a single instance of immediate recurrence of the perforation or of the perforation of a coexisting ulcer. Neither is there an instance of fatal hematemeses or hemorrhage from the sutured ulcer or any coexisting ulcer in either the stomach or duodenum. The consideration of the end results in these cases will be mentioned later.

On the other hand, in Brunner's statistics, comprising three hundred and eighty cases of gastric, and eighty-six additional cases of duodenal ulcer, the following cases of secondary perforation (within one month, in contradistinction to remote), are mentioned (numbers refer to Brunner's bibliography):

CASE 1.—Case of perforation of a duodenal ulcer two days after the suture of a gastric ulcer (80).

CASES 2, 3, 4, 5, 6.—Perforation of a coexisting gastric ulcer, soon after (354), on the third day (270), on the fifth (118), on the seventh (289), on the ninth (52), and on the twenty-first (297) day after operation for the original perforation.

CASE 7.—A case reported by Brunner, in which after the suture of a perforated gastric ulcer secondary perforation took place on the sixth day, just outside of the segment included within the suture.

Since the publication of Brunner's statistics, the writer has not been able to find a single instance in the literature in which this accident has occurred, and can only

mention one instance (personal communication of Dr. Willy Meyer), in which a secondary perforation occurred six and one-half weeks after the closure of a perforation by suture only, with a fatal termination. Secondary hemorrhage is also a very rare sequella after closure of a perforation by suture only. The following instances of this complication are mentioned by Brunner:

CASE A.—Hemorrhage on the twenty-third day after closure of a perforation, in which a part of the ulcer had not been included in the suture (352).

CASE B.—Hemorrhage occurring on the first day after perforation, in which the perforation was not found at the time of operation (214).

CASES C and D.—One case of eight days and one of one day (84 and 193), in which after suture of a gastric ulcer, a fatal hemorrhage occurred from a coexisting duodenal ulcer.

CASES E and F.—In these two cases of multiple ulceration (76 and 244) the source of the secondary hemorrhage could not be accurately determined.

CASES G and H.—In both of these cases fatal hematemeses occurred, no autopsy being allowed (23 and 349).

(1.) Heussler (*verhandlung der deutschen gesellschaft für chirurgie*, 1895, S. 39) reports a case of fatal hemorrhage three days after the closure of a perforation from a second ulcer.

The writer has been unable to find any further mention of instances of secondary hemorrhage.

That this complication can occur also after closure of the perforation with a gastro-enterostomy is shown by a case<sup>st</sup> in Brunner's statistics, in which twenty-three days after closure of a perforation a secondary gastro-enterostomy was done on account of pyloric stenosis. On the following day a fatal hemorrhage occurred from a coexisting ulcer.

Although no instances of secondary perforation after the closure of a gastric or duodenal perforation by suture with gastro-enterostomy can be found in the literature, yet, that gastro-enterostomy as a means of treatment of simple ulcer of the stomach without perforation is not adequate to prevent that accident, is shown by the following cases:

A; cases in which perforation took place shortly after a gastro-enterostomy; Case 1 Krogius reports an instance of gastro-enterostomy in a man of fifty-seven for sim-

ple ulcer of the stomach where perforation took place ten days after the operation; the same surgeon reports a case of gastro-enterostomy for an ulcer near the lesser curvature in which perforation took place five days later. He refers in general to seven such cases in which three recovered and four died; Ziegler (*Muencher Medizinische Wochenschrift*, 1899, p. 554), refers to a case in which two days after a gastro-enterostomy for ulcer, perforation took place.

B; perforation occurring months or years after gastro-enterostomy for ulcer or benign stenosis; (1), those occurring in a part of the stomach not connected with the anastomosis; Haim reports a case of perforation of the stomach six months after a gastro-enterostomy for pyloric stenosis (*Archives*, Vol. 75); Körte<sup>26</sup> reports a case of posterior gastro-enterostomy for pyloric stenosis with the Murphy button; five years afterward, there having been symptoms in the interval, an acute perforation developed near an ulcer in the pyloric region; Körte reports a case of acute perforation nine months after an anterior gastro-enterostomy by suture for benign stenosis, no symptoms having occurred in the interval. Cuff<sup>24</sup> reports the following very interesting case. Male 27; acute perforation in the first portion of the duodenum which was closed by suture. The operation revealed a condition of pyloric obstruction with considerable dilatation of the stomach and gastropnoia for which six weeks later, an anterior gastro-enterostomy was done. This was followed by a complete cure for seven months, after which the symptoms recurred in intermittent attacks of variable severity. Four and one-third years after the first operation (closure of pyloric perforation), symptoms of acute perforation again developed and immediate operation revealed a perforation near the cardiac end of the stomach. The anastomosis was still patent but possibly constricted by adhesions; VanEiselberg reports a case of pyloroplasty according to the method of Billroth ii for chronic stenosis of the pylorus, followed immediately by an anterior gastro-enterostomy with Murphy's button. This operation was done by another surgeon whose name is not given. One year later VanEiselberg operated on this patient for acute perforation, the size of a ten-cent piece directly over the gastro-enterostomy opening.

(2) Those directly associated with the anastomosis: Brentano<sup>21</sup> reports the follow-

ing case: Female, 26, Antecolic gastro-enterostomy with Braun's anastomosis for pyloric stenosis. Some months later an acute perforation developed which on operation proved to be the result of the separation of one-third of the jejunal loop from its attachment to the stomach which was thickened and callused. A posterior gastro-enterostomy with the proximal loop of the original anastomosis was done with an excellent result; Körte mentions an instance in which three years after an anterior gastro-enterostomy by suture for benign pyloric stenosis acute perforation of a peptic jejunal ulcer developed at the junction of the stomach and small intestine; Körte reports a second case in which a posterior gastro-enterostomy plus entero-anastomosis was done with a Murphy's button. Three and two-thirds' years afterward, the orifice contracted and an anterior gastro-enterostomy was done for persistent vomiting. Nine months after this operation acute perforation occurred at the junction of the small intestine and stomach.

The subject of gastro-enterostomy in connection with perforation would be incomplete without reference to the possibility of the formation, with or without subsequent perforation, of a peptic ulcer in the adjacent jejunum. In 1903 Brodnitz (*Centralblatt für Chirurgie*, 1903, p. 83), reports such a case resulting in the formation of a gastro-colic and jejunal colic fistula and refers to fourteen others collected from the literature, in none of which, however, had the gastro-enterostomy been done in connection with acute perforation.

Although the writer has found but one instance of a remote perforation (recurrent) occurring after the closure of the perforation with gastro-enterostomy (case reported by Cuff<sup>24</sup>), the following four instances of that accident occurring where the perforation was closed without gastro-enterostomy may be mentioned.

Paterson<sup>25</sup> mentions a fatal termination following a second perforation twenty-one months after the closure of the original perforation; Caird<sup>23</sup> refers to the closure of a perforation on the anterior wall of the stomach near the lesser curvature five inches from the pylorus, in which a second perforation occurred in the same place thirteen and one-half months later; Brewer (*Annals of Surgery*, 1908), reports a case of a perforation in a young man treated by closure only, in which nine months after, a second perforation occurred at practically the same point. This was again sutured



and a gastro-enterostomy added, the patient making an excellent recovery; Willis (*British Medical Journal*, 1907, 1. page 926), reports a case of perforation in a male of thirty-three, at the cardiac end of the stomach near the greater curvature of eighteen hours' standing, which was closed by suture. Nine months later, there having been no intervening symptoms, another perforation of eight hours' standing, this time in the pyloric zone, was closed by suture. A careful inspection of the site of the previous ulcer revealed no trace of it, not even an adhesion. The patient's health, two months after this operation, was excellent and the suggestion of a posterior gastro-enterostomy was declined.

A brief abstract of the thirty-four cases already referred to, in which the closure of a gastric or duodenal perforation was supplemented by a gastro-enterostomy, follows:

CASE 1.—Braun (*Zentral für Chirurgie*, p. 739, 1897). Owing to the friability of the adjacent stomach wall, the closure of the perforation could be effected only by the superposition of an omental flap. Anterior gastro-enterostomy. The patient was in good health three and one-half years afterward.

CASES 2 and 3.—Paterson, (*Ibid.*)<sup>66</sup>. In both gastro-enterostomy was done at time of original operation, the patients being well two years and fifteen months, respectively, afterwards.

CASE 4.—B. G. A. Moynihan, (*Lancet*, 1905, p. 326). Perforation of stomach closed by suture with gastro-enterostomy; recovery.

CASE 5.—Male, 53; closure of a gastric perforation with posterior gastro-enterostomy; recovery.

CASE 6.—Brentano; female, 26; anterior gastro-enterostomy with Braun's anastomosis for pyloric stenosis. Some months later a sudden acute perforation at the jejunal attachment of the stomach treated by closure with a posterior gastro-enterostomy; recovery.

CASE 7.—Musser and Keen; operation for gastric perforation by closure with gastro-enterostomy with Murphy's button in 1903. At the time of the report, the button was still *in situ* and the cause of pain.

CASE 8.—Caird (*Transactions Med. Surg. Soc.*, Edinb., 1906, n. s. 25 274-325). Female, 37; large perforation of seventeen hours' standing on anterior surface of pylorus; closure; posterior gastro-enterostomy on account of the resulting constriction of the pylorus. Death twelve hours later.

CASE 9.—Caird, *ibid*; female, 22; a recurrent perforation thirteen months after the closure of the primary perforation near the old site. Marked hour glass contraction with numerous adhesions. Operation nineteen hours after perforation. Closure with posterior gastro-enterostomy; recovery. The patient had been entirely well in the interval between the attacks.

CASE 10.—Caird, *ibid*; female, 31; closure of pyloric perforation of ten hours' standing; posterior gastro-enterostomy on account of constric-

tion of pylorus. Death ten days afterward from broncho-pneumonia and chronic nephritis, there being no peritonitis.

CASE 11.—Caird, *ibid*; male, 35; closure of a long pyloric perforation with posterior gastro-enterostomy; recovery.

CASE 12.—Miles (*Translations Med. Surg. Soc.*, Edinb., n. s. 25. 287-325); male, 49; closure of a perforation in a very thickened pyloric ulcer with gastro-enterostomy. Death nine hours later.

CASE 13.—Miles, *ibid*; closure of a duodenal ulcer, with a posterior gastro-enterostomy on account of the resulting constriction; death.

CASE 14.—Howitt (*Med. Record*, 1900, II., p. 551); excision and suture with anterior gastro-enterostomy with Murphy button for perforating pyloric ulcer; recovery.

CASE 15.—Moynihan (*Lancet*, 1901, II, p. 1656; closure and gastro-enterostomy with Murphy button on account of resulting constriction of a perforation on the anterior wall of the duodenum; death occurred on the first day after operation.

CASE 16.—Nöetzel<sup>68</sup>; male, 31; excision, suture, superposition of an omental flap for a pyloric perforation of nine hours' standing. Gastro-enterostomy after Van Hacker. Two and one-half years later patient's health was excellent.

CASE 17.—*Ibid*; male, 23; a similar operation as in the preceding case was done for a pyloric perforation near the lesser curvature of three days standing; death three days later. Examination showed the line of suture continent.

CASE 18.—*Ibid*; male, 33; a similar operation as in the preceding case was done for a pyloric perforation the size of a pea of forty hours' standing; recovery.

CASE 19.—*Ibid*; male, 65; excision, suture with superposition of omental flap for a pyloric perforation of three hours' standing, the size of a pea. Posterior gastro-enterostomy with Murphy button; death ten hours later.

CASE 20.—*Ibid*; male, 25; excision, suture, tampon between the liver and gall-bladder with posterior gastro-enterostomy after Van Hacker for perforation the size of a pea, on the anterior wall of the pylorus. Notwithstanding a general peritonitis at the time of operation including the pelvis and the fact that the operation lasted one and one-quarter hours, the patient recovered.

CASE 21.—Haim<sup>31</sup>; female, 70; closure and posterior gastro-enterostomy with Murphy button on account of the resulting constriction of a pyloric perforation of five and one-half hours' standing; recovery.

CASES 22, 23, 24, 25, 26, 27, 28, 29, 30.—Körte; seven recoveries and two deaths, the latter in cases of perforation of twenty-four hours' standing. In three of these cases a posterior gastro-enterostomy was done on account of dilatation of the stomach, a tumor-like thickening of the pylorus and on account of the callus edges of the perforating ulcer, respectively. In the remainder the gastro-enterostomy was added on account of the constriction of the pylorus which resulted from the suture of the perforation.

CASES 31, 32 and 33.—Caird; one recovery and two deaths. In each case the gastro-enterostomy was added on account of the undue constriction of the pylorus through the suture of the perforation.

CASE 34.—Hartwell (*Annals of Surgery*, 1908); partial closure with omental flap of a saddle-

shaped ulcer on the lesser curvature near the pylorus. Posterior gastro-enterostomy with Murphy button on account of evident stricture of the pylorus; recovery.

CASE 35.—Brewer (*Annals of Surgery*, 1908); case previously quoted of recurrence of perforation on the anterior wall of the stomach after closure of the original perforation by suture only. After closure of the recurrent perforation a posterior gastro-enterostomy was added to prevent further trouble; recovery.

That an added gastro-enterostomy, by prolonging the operation for perforated gastric or duodenal ulcer may jeopardize the patient's chances of recovery, has already been mentioned. For this reason a gastro-enterostomy may be done subsequent to the original operation and is always indicated in case of persistence or recurrence of gastric symptoms. That, on the other hand, in the absence of gastric symptoms a gastro-enterostomy is indicated as a routine measure with the intention of forestalling possible recurrence is probably not quite justified by the end results of those cases in which closure only has been practised. Two cases, however, in which a posterior gastro-enterostomy was added after an interval of months, since the closure of the original perforation, are published by Scudder.<sup>64</sup>

CASE 1.—Male, 34; posterior gastro-enterostomy four months after the closure of an acute perforation of the pylorus, there having been no symptoms in the interval. Six months after the second operation the patient still complained of burning sensations in the epigastrium.

CASE 2.—Male, 24; five weeks after the closure of an acute duodenal perforation a posterior gastro-enterostomy was added, simply to give coexisting ulcers in the duodenum or stomach, if present, a chance to heal; ten months later the patient was in good health.

Those cases of perforation treated by closure only, in which a recurrence of the perforation has taken place have already been mentioned. It is equally important in order to reach a satisfactory conclusion as to the comparative value of the two methods of treatment, to call attention to all those cases in which the persistence or recurrence of symptoms, while not leading to perforation, have nevertheless required a gastro-enterostomy. In this connection, the following cases have been collected by the writer:

CASE 1.—Ackerman (*These de Laussane*, 1896); male, 42; excision with suture of a pyloric perforation of twelve hours' standing; six months later a posterior gastro-enterostomy on account of "painful crises"; recovery.

CASE 2.—Wilson, A. C. (*Lancet*, 1904, I, p. 160). Recurrence six months after operation for pyloric perforation, marked by severe gastric

symptoms and emaciation. On operation a large ragged ulcer was found near the original site, necessitating pylorotomy with a posterior gastro-enterostomy; recovery.

CASE 3.—Haim; four months after the original operation a secondary gastro-enterostomy was required on account of gastric symptoms.

CASE 4.—BRENTANO; male, 24; four months after original operation a posterior gastro-enterostomy was required on account of the persistence of stomach symptoms; recovery.

CASE 5.—Körte; four months after the original operation a posterior gastro-enterostomy was required relieving the symptoms, which had been persistent, only in part.

CASE 6.—Ford; male, 23; primary operation for acute duodenal perforation one and one-half inches from the pylorus of six hours' standing. Thirty days after, a posterior gastro-enterostomy was done, the exact indication not being stated.

CASE 7.—Gibbon, in discussion of Musser and Martin refers to a case in which eighteen months after the closure of a perforation a gastro-enterostomy was required to relieve persistent gastric symptoms.

CASES 8, 9 and 10.—Personal communication already referred to. Of eighty-two cases, treated by closure only, three required subsequent gastro-enterostomy, one of which was due to a recurrence at the end of four years after the primary operation.

The following cases of persistent and recurrent symptoms in none of which was gastro-enterostomy done, are conveniently grouped under the head of recurrences:

CASE 1.—Atherton (*Med. Rec.*, 1901, I, p. 12); male, 62; well for one year after suture of pyloric perforation. Recurrence of gastric symptoms then took place with pulmonary complications, from which the patient died without further operation. (This clinical history suggests the possibility of gastric cancer.)

CASE 2.—Körber; a patient operated on four years ago for perforation, complains of pain and vomiting and has been treated for gastric dilatation due to pyloric stenosis in one of the medical wards. The patient refuses a gastro-enterostomy while the condition seems to warrant.

CASES 3 and 4.—Bruce Clark (*Brit. Med. Jour.*, II, 1905, p. 777). Clark briefly mentions two relapses of which one yielded to medical treatment, while in the other a gastro-enterostomy was recommended on account of pain after eating.

Paterson: "Out of thirty-three patients who could be traced after operation for gastric or duodenal perforation by closure only, sixteen were cured, while of the remainder nine have now definite symptoms of gastric ulcer and five have merely the symptoms of gastric dyspepsia." No further detail is given.

The total number of recurrences after simple closure of a pyloric or duodenal perforation omitting those to which Paterson briefly refers (nine in number) include therefore four cases of recurrent perforation proper, requiring a second laparotomy for their closure, nine cases in which recur-



rence or persistence of gastric symptoms required gastro-enterostomy, by which all but one were relieved of their symptoms, and four cases of persistent or recurrent symptoms in which no gastro-enterostomy was done, a total of seventeen. For the purpose of comparison, it is well to add here a brief abstract of all those cases collected by the writer from the literature and from personal communication in which the operation of closure without gastro-enterostomy seemed to give relief from all gastric symptoms.

CASE 1.—Hartman, Terrier and Hartman, refer in their work on gastric surgery to one case of perforation on the anterior wall of the stomach near the cardia, treated by tampon, in which the patient was entirely well at the end of four years.

CASE 2.—F. Brunner; girl, 22; eighteen months after suture of a perforation, patient was still slightly hysterical and was obliged to be careful in eating, but was otherwise completely well.

CASES 3, 4, 5.—Haim. These patients were completely well one, two and three years, respectively, after the closure of perforations by suture.

CASES 6, 7, 8, 9, 10.—Körper. These patients in which the perforation was treated by suture only, were completely well six years, three years two months, three years one month, one year two months, respectively, afterward.

CASES 11, 12, 13, 14.—Körte. These patients were completely well three years, six years, twelve and twenty-four months, respectively, after the closure of the perforation.

CASE 15.—Musser. This patient in whom the perforation was closed by suture was entirely well five years after the operation.

CASE 16.—Dixon. Ulcer in the anterior wall of the stomach treated by excision and suture. The patient was entirely well one year after the operation.

CASE 17.—Hessert<sup>30</sup>. Female, 19; health excellent sixteen months after the suture of a perforation near the cardia.

CASE 18.—Peters<sup>51</sup>. Male, 36; entirely well one year after the closure of a duodenal ulcer one and one-half inches from the pylorus.

CASE 19.—VanEiselsberg,<sup>56</sup> Female, 22; closure of perforation near the lesser curvature by suture. Convalescence interrupted by empyema. Well, three and one-half years afterward.

CASE 20.—*Ibid*; male, 45; closure of perforation near the pylorus with jejunostomy. Patient in excellent health two and one-half years afterward.

CASE 21.—*Ibid*; patient entirely well after the closure of a perforation at the end of four months.

CASE 22.—Nöetzel. Female, 18; small perforation on anterior wall. Excision and suture. Patient well two years later.

CASE 23.—*Ibid*; female, 21; excision and closure of ulcer; perforation on anterior wall. Patient healthy two years afterward.

CASE 24.—*Ibid*; male, 22; excision and suture of small ulcer in anterior wall near lesser curvature; well six months later.

CASE 25.—Peck; personal communication. Ulcer at pylorus, probably duodenal. Patient well four

months after operation. Could not be traced further. (1).

CASE 26.—*Ibid*; (2) Perforation on anterior wall near the pylorus. Perfectly well three years and nine months after operation. Not heard from since.

CASE 27.—*Ibid*; (4) Ulcer on anterior wall pyloric half. In good health without stomach symptoms two years and five months after operation.

CASE 28.—*Ibid*; (5). Ulcer on anterior wall, pyloric half. In good health without stomach symptoms two years after the operation.

CASE 29.—*Ibid*; (7). Ulcer at middle of anterior wall. Slow perforation. One year and three months after operation still complains of occasional indigestion with pain, but is otherwise well and attends to business regularly.

CASE 30. (8). Duodenal ulcer. In good health seven months after operation. (Numbers 1, 2, 4, 5, 7, 8, refer to the numbers of these cases reported originally in the *New York Medical Record* of 1907, Vol. 72, p. 930).

CASE 31.—Gibbon; personal communication. Closure of perforation by simple suture. Entirely well two and one-half years after operation.

CASE 32.—*Ibid*. Perforation treated by simple suture, entirely well five and one-half years after operation.

CASE 33.—White<sup>70</sup>. Author briefly refers to a case of perforation treated by simple suture; well "months" after the operation.

CASES 34, 35, 36, 37, 38. A Barker (*Lancet*, 1899, Vol. II, p. 1668). Author briefly refers to five cases, of which four were cured and one, after a threatened recurrent perforation, yielding to rest and diet, recovered and was well after three years.

CASES 39-48.—W. Bruce Clark (*British Medical Journal*, 1905, Vol. II, p. 777). Author briefly refers to nine cures without mention of the length of time that elapsed after the operation.

CASES 49-65.—Paterson. Author has collected fifty-four recoveries from different London hospitals (possibly including some of the cases already referred to by reporters in the *Lancet* and *British Medical Journal*, and therefore not included in the summary). Of these thirty-three could be traced and of these thirty-three, sixteen were reported cured. (No time given.)

CASES 48-53.—Of the nine cases reported in this paper by the writer, eight recovered and of these eight cases, Case 1 was completely free from symptoms four and one-half years after the operation, at which time she was lost sight of. Case 2 is practically well, save for the fact that slight indigestion is apt to follow indiscretion in diet, three and one-half years after operation. Case 3 is completely well three and one-third years after operation. Case 4 remained in the best of health for two and one-half years. During the past six months he has had two attacks of gastric pain of equal severity to that which the patient experienced prior to the operation. This patient would probably be materially benefited by gastro-enterostomy, although, at the present time he is free from pain and able to follow his occupation which is that of a fireman. Case 5, recently lost sight of, was in excellent health two years after the operation.

Cases 6, 7 and 8 are so recent that they are without value as a criterion for judging the end result.

(To be continued.)

## OBSERVATIONS ON GASTRIC ULCER.\*

By D. A. Currie, M. D., Englewood, N. J.

Gastric ulcer may involve a limited portion of one or more, commonly all, of the coats of the stomach, resulting in a sore of varying extent. The acute form has the appearance of a hole made by a punch instrument.

The chronic ulcer is of slower formation and involves a much greater area, and shelves gradually from the mucous and the submucous to the muscular and peritoneal coats, causing it to assume more of a funnel shape. This form, under favorable circumstances, tends to a cure. The acute shows a less benign tendency. Cicatrization often leads to deformity of the stomach, especially when the ulcer occupies a position at or near the pyloric orifice. In both forms, acute and chronic, hemorrhage often occurs, while perforation of the stomach wall occasionally results.

Duodenal ulcer is closely related to gastric ulcer. It may involve the orifice of the bile duct, and through inflammatory adhesion cause biliary obstruction. Symptoms of gallstone may be prominent. Pain is not very severe and vomiting seldom occurs. The skin may assume a decided jaundiced appearance. A distinct mass, tender to the touch, is occasionally found in close proximity with the gall-bladder and difficult to differentiate from the gall-bladder or the pyloric end of the stomach. In cases of ulcer of the stomach pain appears soon after ingestion of food and is followed by vomiting. In duodenal ulcer the food will not cause pain until an hour or two after a meal.

Hemorrhage is absent in many cases of chronic ulceration of either stomach or intestine. I mean by chronic, those cases that have come on slowly and where the history of stomach disturbance can be traced back for several months. In all acute cases hemorrhage appears within a few hours after the pain and tenderness have become pronounced enough to require medical attention. The first symptom may be an attack of vomiting with more or less blood; on the other hand, blood may appear in the stools without the occurrence of vomiting.

Pain is seldom entirely absent during the course of gastric ulcer, being caused by the action of the eroding process on the sensory nerve filaments, by the irritation of the sore

by food and drink, or by the corrosive action of the hydrochloric acid. Pain may be fixed or paroxysmal, but is commonly both. The localized pain is present in a small area in both the epigastric and dorsal region, about the twelfth dorsal vertebra and to the left of it. The pain may even simulate anigina pectoris.

Vomiting is very often present, but occurs somewhat later in the disease than pain. If no blood is vomited, the stools should be carefully examined microscopically and otherwise for presence of blood. Physical exertion and the digestive act both favor the development of gastric hemorrhage, as does emotional excitement. The stomach tube is often the cause of profuse bleeding. Those not skilled in its use should avoid this plan of treatment.

Chlorosis often precedes the development of gastric ulcer, or rather, the detection of the disease. Frequent small hemorrhages may occur for a considerable time, bringing about this change in the blood, and the lessened amount of food and the impaired digestion all tend to produce secondary anemia. Profuse and exhausting hemorrhage may take place with no external evidence other than the characteristic sign of shock. Therefore the feces should be carefully and systematically inspected. The hydrochloric acid is usually increased, at least in the earlier stages of gastric ulcer. This chemical condition is of much diagnostic importance, serving to distinguish almost, if not entirely, the non-malignancy of the affection.

**Diagnosis.** Gastric and intestinal flatulence are common conditions due to imperfect starch digestion. Heartburn is also common. There is nothing peculiar regarding the condition of the bowels. The stomach tube is a certain method of ascertaining the state of the gastric function. The differentiation of carcinoma from a simple ulcer is as a rule easy. The absence of free hydrochloric acid from the gastric juice in cancer and the presence of other organic acids, the diminution of ferments when the growth occupies the pylorus, the cachexia and marked wasting in the absence of gastric symptoms, the occurrence of lancinating pains increased by the taking of food or drink with vomiting helps to separate the two. Gastric ulcer is of much more frequent occurrence than is generally supposed, and is more common in northern latitudes.

**Treatment.** The main object is to allow the stomach to have perfect rest. Al-

\* Read before the Bergen County Medical Society, August, 1908.



lay thirst with water, perfectly hot, or very small pieces of ice. Healing of the ulcer is facilitated by the administration of appropriate antacids and sedatives. Sodium bicarbonate, bismuth subgallate, magnesia, etc. The stomach tube is valuable in many ways. It is an aid to diagnosis and a means also of applying remedies to the ulcer. A solution of nitrate of silver—1 to 1,000, may be introduced into the stomach, allowed to remain about three minutes, then withdrawn and the stomach washed out with warm water; this may safely be repeated every third day for three weeks. In the event of hemorrhage, I consider an emulsion of spirits of turpentine, 10 gtt. every fourth hour, the best hemostatic remedy in the materia medica. Bismuth in large doses, one teaspoonful in four ounces of water, may be applied to the supposed location of the ulcer through the stomach tube. In cases of great debility, with a tendency to hemorrhage, such local treatment must not be resorted to. Rectal feeding is often the only means of sustenance. Where food can be borne by the stomach, it should consist of light broths, beef extracts, plain tea and coffee; also bread thoroughly toasted or dried, or toasted crackers, and plenty of water, either hot or cold, if well borne. Upon a diet of this sort I have seen the worst cases recover. If an attack of pain and nausea occur from food, the stomach tube will afford almost immediate relief. Milk, eggs, potatoes and sugar have produced more inconvenience in the cases that have come under my observation than any other article of diet.

### PREVENTION OF MENTAL DISEASE.\*

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Prophylactic measures against disease, including means to inhibit and delay the progress of pathological changes, are of chief importance in modern medical practice.

Limited to the special domains of psychiatry it is still impossible in the time to be given this paper to discuss the subject in detail. My ambition reaches no greater height than that the subject matter of the paper may serve to call to mind some of the important considerations.

The principle of protection against harmful influences in the environments belongs to living matter. Plants are observed to

be provided with the means of defense against attack. In animals the immunities, natural and acquired, are reactions of the organism to noxious substances. A conscious effort at protection is made by animals and primitive man when they provide for themselves shelter and defence against conditions of climate and weather as well as against attack by their enemies.

We have learned from those persons who have made a study of the history of medicine that prophylactic measures against disease and death have been sought for and used through all the ages. The arts and practices of civilization reached a high degree of culture among many races of ancient people. However, a study of the branches of natural science most intimately concerned with our knowledge of living things and especially with an understanding of the structure and physiology of the human body had made little progress as late as the eighteenth century.

The practice of prevention by the most civilized of ancient and medieval races concerned itself with the elementary principles of hygiene. The great advance of modern over ancient preventive conception and procedures was made possible in the century just closed. The perfection of the compound microscope in 1826 led to the establishment of the department of histology and bacteriology. Organic chemistry receiving almost an initial force in the work of Leibig about 1840, has made possible to us some understanding of the nature and the forces at work in living matter.

Superstition in all times and among all races of mankind has played an important part in their attitude toward the cause and treatment of disease. Superstition is assigned as a chief cause of delay in the explanation and understanding of natural phenomena. The belief of the ancients in the Evil Spirit theory of the etiology of disease is brought to mind by many absurd customs and practices of our own times. Ages of ignorance and superstition have left us with an instinct for the supernatural as to the cause, character and treatment of disease.

The dissipation of some of the obscurity surrounding our understanding of the structure of the human body, its physiology and pathology, has let in the light of knowledge that a good deal of what was considered treatment is of no value. Ignorance and false beliefs thus disclosed have operated in the practice of medicine as in those matters which concern the so-called spiritual

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and social well being of the people to swing the pendulum of revolt to the opposite extreme. There are ill-balanced reformers who deny the existence of anything of value in the old therapeutic structure. In medicine, however, as in religion, there is good going for most of us in the middle of the road between the mistaken optimism of some and the narrow and ignorant pessimism of others.

The problem of the prevention of disease is approached in the direction of finding out what causes act. So-called body habits or diatheses were described by early medical writers as putting upon their possessors a liability to particular diseases. A chemical theory of heredity advanced by Professor Adami, of Montreal, explains the relation of form between parent and offspring and takes into account as well the transmission of acquired conditions of disease. While eminent authority affirms the potential factor for the development of mental alienation exists in an inherited predisposition, we must realize as ultimate causes the unfavorable conditions of environment which have acted to bring about the reduction of nervous stability.

It is of importance to remember that the evidence of predisposition to mental disease is to be observed not only in the insanity of a progenitor but as well in such abnormal manifestations as extreme nervousness, eccentricity, hysterical tendencies, chronic drunkenness, epilepsy, criminality, etc., and that the inheritance is not of any particular type but rather of weakness and susceptibility to disorder.

Asylum statistics on the subject of heredity do not show the facts. Family histories are not always carefully taken. Sometimes it is impossible to get any family history. Frequently a reliable history which includes more than two generations cannot be obtained. Information as to minor degenerative conditions of nervousness, etc., are often denied because unrecognized. Drunkenness and criminality in a family are for obvious reasons concealed. In this institution an examination of the last 296 cases admitted shows that a positive history of family insanity was obtained in 74; that is, 25 per cent.

If it were possible to free the mind from a knowledge of what we have in the way of statistics as well as from the pronouncement of eminent authority on this subject, some years of routine work in taking the histories of asylum patients and under these circumstances as well as on other occasions

meeting their relatives, would furnish ample evidence of an objective character to establish a firm belief in the doctrine of heredity.

In the ultimate analysis such close approach as may be possible to normal and natural conditions of environment having due regard to protection from harmful influences is the first consideration of prophylactic medicine. Education in matters of public and personal hygiene is engaging an increasingly greater measure of professional and popular interest and it is along this line in connection with the subject of heredity that we may confidently expect to improve the average of health.

To modify the operation of the forces of heredity which predispose to diseases of the mind consideration should be given to the problem of marriage. In line with the present popular movement to regulate everything from the conduct of the business of the barber to the control of giant corporations it would seem to be a propitious time or at least safe to suggest that the contract of marriage might be the subject of more stringent regulation. Aside from the medical aspect of the subject as it concerns the prevention of disease, the economical side in relation to the burden imposed upon the State to support mental incompetents is of vast importance.

It would seem that a law prohibiting marriage where one, or certainly when both of the contracting parties have suffered from idiopathic epilepsy or insanity would not be too drastic for our time. Surely the physician should proffer advice against marriage under these conditions.

In the case of family history of mental disease and with lesser degree of taint of nervous instability, especially chronic alcoholism, due consideration should be given to the probability of the transmission to offspring of the inheritance of degeneracy.

While advice on the question of the advisability of marriage will in the near future be sought but infrequently of the practitioner, the advent of children in the family will give opportunity to the family physician to advise as to their rearing. Designation of the family physician is made because his friendly, advisory position in the family and his intimate knowledge of family history will often make it possible for him to tender advice and counsel. It is for him to weigh the probabilities of heredity in respect to conditions of environment and to urge such measures of mental and physical hygiene as will give to the child the best chance of favorable development and the



avoidance of stress and strain. The difficulties to be encountered will be very great indeed. The mental weaknesses of parents which have been transmitted to the offspring and which we are to try to strengthen creates an environment of just the undesirable kind and character to be shunned and the children are often placed at the mercy of vicious example and suggestion.

What may be accomplished to improve this pernicious circle of circumstances is the problem to be solved and the degree of success is the measure of the physician's understanding of the case and his skill in handling it. By education, suggestion and correction the effort is made to add force to the inhibition of unnatural, undesirable and one-sided tendencies and to stimulate the growth of dormant, but desirable characters. The higher education of women might well concern itself more with maternal duties in the direction of mind culture in children.

Insanity before the age of puberty is uncommon. Such measures of physical and mental hygiene as are put in practice during childhood serve as the prophylaxis of puberty and adolescence.

Forms of mental disease peculiar to the period between the ages of 15 and 25 years are included under the title *dementia praecox*. Kraepelin states that 14-15 per cent. of all insanities are grouped in this class. Our own statistics for the year 1907 show 17 per cent. Kraepelin found the taint of heredity in 70 per cent. of the cases of *dementia praecox*. He says of its nature "we are in the dark but the view prevails that we are dealing with an insufficient amount of vital force." These observations may be taken as the text of prevention—the elaboration of this text has to do with the ways and means to be employed for the conservation of this "insufficient vital force" before and during this critical period of mental and physical growth.

Modern students of educational methods realize the dangerous tendency to force the acquisition of knowledge on young and growing children. In this paper the suggestion only is permitted that in the capacity of family physician, or perhaps, in some official relation it may be possible to emphasize the importance of classifying children in respect to their varying capabilities for mental work so that some hereditarily weak may not be driven to a premature and untimely exhaustion.

Before and about the age of puberty most

children begin the practice of masturbation. The injurious effects of this practice within the limits that it is commonly indulged in by fairly healthy children is overestimated. It is the weight of opinion among alienists that masturbation is seldom more than one of the lesser contributing causes of mental disease. When practiced to considerable excess it is rather considered a symptom of a weakened self-control—an expression of mental inferiority. In those children with a degenerate, nervous inheritance, it operates as one of the exciting causes of further nervous degradation and the advice to child and parents should be with the aim of teaching the abasing and weakening effect of the practice.

I am reminded to say that offering advice and counsel on one occasion is not sufficient. In this direction, as in others, where an effort is being made to influence mental attitude and development, it is only in the way of repeated suggestion and declaration that we may hope for results.

At the age of puberty and later, during the period of adolescence, is the time when boys take on the alcohol and tobacco habits. There are a good many seasoned drinkers and a few persons who claim to have made a study of the effects of alcohol on the tissues, who contend that a moderate amount of alcohol not only does no harm, but is actually beneficial. In the case of adults such a statement unqualified by the exclusion of the very large percentage of the population who show certain deviation more or less marked from a fairly normal standard of health is not true. A failure to recognize wide-spread departure from normal conditions of health and the tendency toward intensification of abnormal deviations is a source of much misunderstanding.

In the matter of the use of alcohol, there are probably none who make the contention that it is good for, or harmless, when taken by growing children. By all odds the consensus of opinion is that alcohol and tobacco are tissue poisons, acting especially on the more delicate and highly organized nervous structures. It is quite logical then, when we have found in the case of our young patients, that their ancestors were of degenerate and unstable nervous stock, that it is indicated to us with especial positiveness to prevent, if possible, a beginning in the use of these drugs. The amount of alcohol, tobacco, tea, coffee or other exogenous poison which constitutes the excess which all agree is pernicious, varies as does

the individual weakness and susceptibility. For the mentally unstable person, and in whom the probability of insanity exists, we should counsel in the most forceful way total abstinence.

It is, as a rule, during this period of adolescence and young manhood that syphilis is acquired. Every man who has had syphilis does not have parietic dementia, but the books tell us that more than 70 per cent. of parietics give a history of syphilis and that probably most of the remaining number have had the disease. Parietic dementia is only one, but it is perhaps, the most appalling sequel of syphilis attacking men in the prime of life and often in the acme of life's successes and enjoyments, and bringing them within a few years at most from this high estate to a most pitiful and disgusting death. This is a two-fold preventable disease.

Continence before marriage is a habit to be enjoined from the standpoint of moral rectitude, and as a measure of prevention of disease. In this problem of sexual illegitimacy, however, as in other matters where there is a related moral and physical degradation, no corrective measures should be put aside because by their application there is given a recognition to vice. The regulation of prostitution by law, compulsory hygiene among prostitutes, as well as education (beginning with boys and girls of proper age) in sexual matters and the prevention of venereal disease are all means to the same end and that end is worth any means.

With the approach of maturity the family doctor's opportunity of offering advice and influencing the mental and physical development of the patients will grow less. The most important work in this direction must be accomplished before the higher education takes the boy or girl away from home. A medical director in the college who could continue the work of the family physician, acting with the aid of his advice on matters of heredity and previous environmental influences, would be an advance over present conditions.

The importance of wisely judging the amount and kind of education in connection with choosing a vocation suited to the mental and physical possibilities of the individual will be appreciated. The ambition of parents to give to their children the best education possible is a laudable one, but they should be warned and instructed in the danger of entering a competition that will call for the expenditure of more energy

than the individual is likely to have at command.

Other circumstances being equal, we may say that the later the age at which the symptoms of mental disease make their appearance the more stable the nervous patrimony of the individual. With the period of adolescence passed without a nervous breakdown, there is a more favorable outlook for the future. During adult life there are innumerable sources of stress incident to making a way in the world, and this probably more strenuous in our time, because of the many complexities of modern life. Naturally, with women child-bearing and nursing often serves to impose a nervous strain sufficient to excite an insanity.

The puerperal insanities are usually excited by a toxæmia, or are due to exhaustion. The puerperal period is always a time of especial concern and care on the part of the physician for the prevention of disorder. The prophylaxis usually employed at this time includes all that is of value against insanity. In women with hereditary mental weakness amounting under the strain of the puerperium to a fair probability of mental break-down, and especially when the nervous reduction on the part of the husband bespeaks for a child doubly tainted with the qualities of degeneracy the prophylaxis instituted by the physician should be in the direction of counseling the avoidance of conception.

Prophylactic measures against diseases of the mind, if begun in childhood and continued during adolescence will, by virtue of habit and the good influence produced, be continued through the years of maturity. If, however, we do not get our patients until middle life, when they seek advice because of some imminent signs of disease, we are presented with a hard and often hopeless problem.

Parietic dementia and the insanities induced by alcohol and other drug addictions make their appearance for the most part in middle life. As has been pointed out education in these matters must begin early. Maudsley says, "advice to do any good must have guided the direction of his education." "We cannot efface the years of growth and development." You might as well preach moderation to the hurricane, etc., as talk philosophy to one whose antecedent life has conducted him to the edge of madness.

In advising against even the moderate use of alcohol, tobacco, tea and coffee, and for temperance in eating, especially in the



consumption of meats, we often hear it said, for example, even by members of our own profession, "John Jones drank whiskey and used tobacco all his life; he lived to be 90 years old, was as steady as a clock and never had a sick day." "Why, I eat everything that comes along." Such statements may be perfectly true, but prove nothing more than that John Jones had protoplasm with a high index in respect to some of the attributes of living matter; that he was either ignorant of, or without due regard for the probable effect of his intemperance on his offspring; and that probably he started the ball rolling in the direction of family degeneracy, establishing that condition of hereditary weakness that will be such a curse to subsequent generations of Joneses. It is my desire to emphasize the prevalence in the human race of all grades of deviation and reduction from a normal excellence of protoplasm and that continued reduction is accomplished by deleterious influences, with decreasing resistance. It is our duty as physicians to turn the tide, if possible, in the direction of regeneration and to make more comfortable and happy the lives of the unfortunate legatees of disease.

That one cannot, as expressed by Maudsley, entirely escape the tyranny of his ancestors is too sadly true, but it is possible that by constant, persistent, well-directed effort one can start the process of regeneration and in some degree mitigate the suffering for "the sins of the fathers." An attempt at regeneration is an obligation enjoined on the individual who assumes the responsibility of propagating his kind.

The quality and amount of food to be taken by persons of degenerate nervous organization is not governed by hard and fast rules. Associated with the nervous disorder there is, very probably, disease of some of the body tissues as well as individual idiosyncrasies. Within the last few years scientific opinions, based upon experiment, have been presented, somewhat at variance with formerly accepted ideas concerning the diet for persons in health.

Professor Chittenden, from experiments made at Yale University and set forth in his book, "Physiological Economy in Nutrition," writes: "It is obvious \* \* \* that the smallest amount of food that will serve to maintain bodily mental vigor, keep up bodily strength and preserve the normal powers of resistance to disease is the ideal diet. Any excess over and above what is needed for these imposes just so much of an unnecessary strain upon the organism.

It entails a wasteful expenditure of energy that might better be preserved for future emergencies. It imposes upon the excretory organs the needless labor of removing waste products which could well be dispensed with, to say nothing of the possible physiological action of these products as they circulate through the body."

It is to be believed the subject of Physiological Economy in Nutrition, temperance in the consumption of food and particularly the reduction to a minimum of the intake of proteid food (mostly meat) is of far-reaching importance in the prevention of mental disease. If the conclusions of Professor Chittenden are of value as showing one way to aid in preserving the health of normal individuals they should have far greater force and applicability as concerns those persons of unstable nervous organization where the conservation of energy, the reduction to a minimum of the wear and tear on the machinery of the body and the elimination so far as possible of toxic substances from the environment of the cells, are essential considerations.

An especial application of the practice of prevention of mental disease presents in the consideration of those persons who have recovered from an attack. In some States societies exist for the purpose of affording to those persons with no regular medical advisor the benefits of observation and prophylactic treatment. The idea is to continue the patients as far as possible in the practice of measures of personal hygiene and in other treatment as may be indicated.

It is to be desired that in New Jersey such societies will be formed to look after cases coming not only from the Hospitals for the Insane, but from the General Hospitals.

In conclusion, gentlemen, I venture the hope that you will give color and form to this incomplete sketch of the prophylaxis of mental disease by supplying from the generous store of your knowledge and experience the details which will make it in some measure a likeness of present day conceptions of the subject.

#### SURGICAL RIGHTS OF THE PUBLIC.

Dr. John C. Munro of Boston read a paper with this title before the Canadian Medical Association, in which many questions are discussed. The paper appears in the *Canada Lancet*, September, 1908. Concerning vivisection the author says:

"To enter upon the relation of animal

experimentation as applied to the development of surgery is very tempting. Its bearing on the principles of surgery and on surgical technique is of tremendous import so far as the great mass of the people is concerned. The latter has learned to trust in the unselfish honesty of the medical profession, and the responsibility is far more serious than the anti-vivisectionists can realize if humane surgical advance is checked by the indiscriminating and narrow bigotry of ignorant partisans. I believe that if a deliberate and thoughtful expression of views of the practical surgeons of the world were taken today an overwhelming majority would gratefully acknowledge its obligations to animal experimentation, as instanced in the daily relief of suffering and prevention of disease. It is almost pathetically comical that we should be confronted time and again by the ignorant and probably thoughtless views of two defunct and famous surgeons upon this subject. Both men lived at the very dawn of modern scientific surgery; neither was young enough to grasp the significance of the new surgical discoveries, while each one had been a too-dominating power in certain narrow lines of surgical advance to be willing to accept the broader teachings of others. One directed his genius to mechanical problems; the other demonstrated advancement by means of human experimentation, all of which had to be worked out at a later period by laborious scientific research. The thoughtless and possibly hasty views of these men have been hurled at the thousands of modern surgeons by the opponents of animal experimentation, but I am confident that if Bigelow and Tait were alive today their dominating geniuses and grasp of the truth would enroll them as most enthusiastic and powerful allies in the struggle against the anti-vivisectionists. The layman, as a potential surgical patient, is more keenly interested in this controversy than he realizes. When the surgical thunderbolt strikes him or his family he wants and demands as his right the use of every nicety that will diminish risk and lead to recovery. I know, and you know as practical surgeons, that we daily use the results of laboratory research, and that if we were deprived of all that has been handed down to us as a result of animal experimentation our surgery would lapse back to a degree frightful to contemplate. This is the side that the layman must seriously consider when he is urged to oppose the profession that has always worked and

struggled on behalf of suffering mankind and that will fight for the principle of animal experimentation because it knows it is just, humane and merciful."

### PRIZE ESSAYS.

Presented at the 142d Annual Meeting of the Medical Society of New Jersey, June, 1908.

#### SECOND PRIZE.

### Feeding During the First Two Years in Infancy.

By Floy McEwen, M. D., Newark, N. J.

The ideal food for the infant during the larger part of the first year is a good mother's milk. The advantages to the child of continuing breast feeding, even where the milk is unsatisfactory and the baby is not making a satisfactory gain, are so great that we are justified in temporarily continuing breast feeding while we make efforts to improve the quantity and quality of the milk. Fortunately this is possible in many cases. To increase the quantity of milk we order yellow corn meal gruel, cocoa and milk to drink between meals, and rest in the recumbent position whenever possible during the day.

To determine the quality of the milk we use Holt's set for the analysis of human milk. This affords us a simple and inexpensive means of determining the relative percentages of the fats and proteids. If the fats are too low they may be increased by rest and a liberal meat diet. Too high proteids may be reduced by regulated exercise. The sugars rarely give us trouble.

It sometimes happens, when a baby is persistently fretful, that a nursing mother will be depressed and anxious about her milk, fearing that she has not enough for her baby. Such a mental state seriously affects the milk supply, altering it in quality and diminishing its amount. Under such circumstances the addition of one or two bottle feedings a day to the breast feedings will restore the mother's confidence and often re-establish normal conditions. For such a temporary feeding we use a mixture of cow's milk containing 2% of fat and give at each feeding the quantity suited to the age and capacity of the baby.

If conditions are normal, breast feeding is continued until the baby is 10½ months old, at which time it is usually advisable to commence weaning. Weaning should always, where possible, be gradual, and the best mixture to commence with is a



modified cow's milk containing 2% of fat. One such bottle feeding a day is given for the first two days, the other four feedings being given from the breast. The following two days, two bottle feedings are given and three feedings from the breast. Then for two days three bottle feedings are given and two feedings from the breast and so every third day the number of bottle feedings is gradually increased until the baby is entirely weaned. The milk is then gradually strengthened until the baby takes a mixture suited to its age and capacity. At this time also there is an advantage in adding a cereal to the diet in the form of a cereal jelly.

Cereal jelly—  
Pettijohn's Breakfast Food, 2 table-  
spoonsful.

Water, 1 quart.  
Salt, a pinch.  
Boil for two hours down to one pint and strain, while hot, through clean cheese cloth wrung out of boiling water. Keep in a cool place.

Of this cereal jelly one tablespoonful is added to the midday bottle for two days, then for two days a tablespoonful is added to two bottles. Then a tablespoonful to the morning, noon and evening bottles. Next a tablespoonful is added to the morning and evening bottles and two tablespoonsful to the midday bottle and so a tablespoonful is added every third day until two tablespoonsful of the cereal jelly are taken with the morning, noon and evening bottles. The second feeding at 9 A. M. and the fourth feeding at 3 P. M. being a plain milk mixture without cereal or other additions.

At the same time that advances are being made with the cereal jelly we gradually strengthen the milk mixture, increasing the percentage of fat and albumenoids as follows:

Top 11 oz.....2.	3½.	6.	9.	11.	11.	11.	11.	11.	11.	11.	11.	11.	Whole milk	26.	28.	30. oz.
Skim Milk.....0.	0.	1.	2.	4.	6.	8.	15.	16.	18.	20.						
Sugar Solution*.4.	6.	11.	15.	15.	15.	15.	15.	14.	12.	10.				8.	6.	5. oz.
Plain Water ...4.	5½.	7.	9.	5.	3.	2.	1.	1.	1.	1.				8.	8.	7. oz.
Milk Powder..One	One	One	One	One	One	One	One	One	One	One				One	One	One
	10	15	25	35	35	35	36	42	42	42	42			42	42	2

(\*1½ oz. Squibb's Milk Sugar in 15 oz. water.)

At from 10 to 11 months a child should be given five feedings a day of 8 to 8½ oz. each at 6 A. M., 9 A. M., 12 noon, 3 P. M. and 6 P. M.  
It is seldom advisable to give a child, before the sixteenth month, a milk mixture containing more than 4% of butter fat and as certified milk and many other

good grades of milk have a fat content of 4.65%, 4.80% and 5% it becomes necessary to dilute such milk in order to bring the fat down to a 4% basis. This is easily accomplished by adding 6 ounces of water to the quart of whole milk, so that a suitable milk mixture for a healthy child from the 11th to the 16th month would be—

Whole Milk.....	1 quart
Plain Water.....	6 ounces
Milk Powder.....	one
	38 ounces

The milk powders are used for the purpose of introducing into the food certain salts, which are normally present in woman's milk and are lacking in cow's milk, and which seem to have an important bearing on the nutrition of the child. The most important of these salts are bicarbonate of potassium and chloride of sodium and they are introduced into the food in the proportion of one grain of the former and three quarters grain of the latter for every ten ounces of food. Some of the manufacturing houses now compress these powders into tablet form which affords us an easy and inexpensive way of introducing these salts into the food.

At 11 months the cereal jelly is discontinued and cereal porridge given in its place.

Cereal Porridge:—  
Pettijohn's Breakfast Food..6 tablespoonsful  
Water .....one quart  
Salt .....a pinch  
Boil for 2 hours down to one pint. Do not strain. Serve from a saucer with a spoon with pasteurized gravity cream poured over it.

By gravity cream is meant the cream that rises on the top of a quart bottle of milk. Cream sold in bottles is largely centrifugal cream, contains from 25% to 30% of butter fat and is too rich for infant feeding.

At 11 months we also add to the diet fresh fruit juice in the form of orange juice.

DIET SHEET FOR A HEALTHY CHILD 11 MONTHS OLD.

First meal, 6.30-7 A. M.—4% milk (pasteurized), cereal porridge with pasteurized gravity cream poured over it.

8.30 A. M.—Fruit Juice. The juice of half an orange squeezed from a cut orange into a spoon, the outside of the fruit having first been washed and dried.

Second Meal, 10 A. M.—4% milk (pasteurized),  $7\frac{1}{2}$  ozs.

Third Meal, 12.30-1 P. M.—Cereal porridge with cream. 4% milk to drink.

Fourth Meal, 3 P. M.—4% milk to drink.

Fifth Meal, 5.30-6 P. M.—Cereal porridge with cream; 4% milk to drink. All that is desired to go to bed on.

Cool water to drink during the day.

At 12 months a normally developed child has six teeth and this is usually an indication for adding bread and butter to the diet. All bread for infant feeding should be two days old. It may be given either toasted or plain. Unsweetened Zwiebach and Huntley and Palmer's breakfast biscuits are also allowable at this time.

#### The Artificial Feeding of Infants.

Artificial feeding becomes necessary when from any cause maternal breast feeding cannot be carried on and the best substitute for mother's milk at the present time seems to be a properly modified cow's milk.

The following tables show the average composition of woman's and cow's milk—

	Woman's Milk.	Cow's Milk.
Fat .....	4%	4%
Albumenoids .	1.50%	4%
Sugar .....	7%	4.50%
Reaction .....	alkaline	acid
Sterility .....	sterile	not sterile when it reaches the child.

It is thus seen that cow's milk differs from woman's milk in three important particulars. First in its acidity; second in its non-sterility and third in its relatively higher percentage of albumenoids, and it is these three features that make it necessary to modify cow's milk before it can be successfully used for infant feeding. When, however, we dilute the milk in order to reduce the albumenoids, we at the same time reduce all the other constituents of the milk. The sugar and fat are thus made too low and it becomes necessary to add cream and sugar in order to restore these two ingredients to a proper percentage. This dilution of the milk and the subsequent addition of cream and sugar constitute the process known as modifying the milk and the product itself after these changes have been made is spoken of as "modified milk."

The ordinary diluents used in modifying cow's milk are water and dextrinized

cereal gruels. As, however, a child has little or no starch digestion before the tenth month of life, it has seemed best, to most observers to use plain water for this purpose.

The acidity of cow's milk is overcome and its reaction rendered alkaline by the addition of fresh lime water in the proportion of one ounce of lime water to twenty ounces of food. It has been found, percentage for percentage, that the butter fat of cow's milk is not as readily digested as the butter fat of woman's milk, so that it is not advisable, at the start, to introduce into a food mixture more than 2% of fat.

The secret of successful bottle feeding is to begin with a weak milk mixture and keep it constantly within the digestive capacity of the child. As the child grows in strength and digestive capacity the food should be progressively strengthened by gradually increasing the percentages of fat and albumenoids. The sugar additions to the food are best made with sugar of milk and it should be the best obtainable. Much of the milk sugar on the market is of an inferior grade and contains casein, fat, starch and other extraneous matters.

The materials necessary to make a suitable food for infant feeding are—

Cream, for the purpose of introducing fat into the mixture; skim milk to introduce albumenoids; sugar of milk, to introduce sugar; plain water, as a diluent, and fresh lime water or milk tablets of potassium and sodium for the purpose of alkalizing or neutralizing the food.

To obtain a cream mixture to introduce fat, we take the top 11 oz. from a quart bottle of milk. It has been found, by numerous analyses, that these eleven ounces, well mixed, contain approximately 10% of fat. This affords us a convenient method of putting into the mixture just the percentage of fat desired.

The simplest way of introducing sugar into the mixture is by means of a 10% sugar solution, made by dissolving  $1\frac{1}{2}$  oz. of Squibb's sugar of milk in 15 oz. of water.

Lime water should be fresh, and where possible, made from distilled water. The capacity of the infant for digesting albumenoids is low and it is therefore advisable to keep them low in the mixture and we do not ordinarily introduce them as such before the middle of the fourth month.

Before we can introduce these several



ingredients into the mixture in the proportions desired, it is necessary to know the number of feedings required during the day and the number of ounces to be given at each feeding.

The following table, prepared by Rotch, may be taken as a general guide:

Age.	Intervals	No. Feedings in 24 hours.	Night Feedings.	Amt. at each Feeding.	Tl ozs. in 24 hours.
1 Week..2		10	1	1	10
2 Weeks..2		10	1	1½	15
4 Weeks..2		10	1	2½	25
6 Weeks..2		9	1	3	27
8 Weeks..2		8	1	3¼	26
3 Months..2		7	0	4	28
4 Months..2		7	0	4½	31½
5 Months..3		6	0	5½	33
6 Months..3		6	0	5¾	34½
7 Months..3		6	0	6¼	37½
8 Months..3		6	0	7	42
9 Months..3		6	0	7	42
10 Months..3		5	0	8½	42½
11 Months..3		5	0	8¾	43¾
12 Months..3		5	0	9	45

As an illustration, we find that a baby one month old requires 10 feedings a day of 2½ ounces each, or 25 ounces of food for the entire day. To introduce 2 per cent. of fat into this mixture 1-5 of the 25 ounces or 5 ounces must be the 10% cream mixture. The next step is to introduce the sugar, which is likewise most easily done by means of a 10% sugar solution. Practically we find that it is seldom desirable to introduce more than 4% of sugar in this way, as the 10% cream mixture itself carries a certain quantity of sugar and these together bring the total percentage of sugar in the mixture up to 5%. To introduce 4% of sugar into the mixture, 1/2 ½ of the 25 ounces or 10 ounces must be the 10% sugar solution. We thus have in our food mixture so far:

Top 11 oz..... 5 ounces  
10% Sugar Solution.....10 ounces  
Making 15 ounces in all.

But as we need 25 ounces of food, the remaining 10 ounces is made up of the diluent, in this case plain water, so that our finished formula would read:

Top 11 ounces from a quart bottle of good milk ..... 5 oz.  
10% Sugar solution, made by dissolving 1 oz. of Squibb's sugar of milk in 10 oz. of water ..... 10 oz.  
Plain water ..... 10 oz.  
25 oz.

Age-Months.....	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	
Top 11 ounces .....	7	8	9	10	11	11	11	11	11	11	11	11	11	11	11	11	ounces.
Skim milk .....	0	0	0	0	0	1	3	5	6½	7½	9	10	12	14	15	18	ounces.
10 per ct. Sugar Solution..	10	12	12	13	14	15	15	15	15	15	15	15	15	15	15	12	ounces.
Plain water .....	9	7	7	5	7	5	6	4	2½	2½	2	1	4	2	1	1	ounces.
Milk Powder .....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	ounce.
Total quantity for 24 hrs..	26	27	28	28	32	32	35	35	35	36	37	37	42	42	42	42	ounces.
No. of feedings daily.....	8	8	7	7	7	7	6	6	6	6	6	6	6	6	6	6	ounces.
Amt. at each feeding.....	3¾	3¾	4	4	4½	4½	5½	5½	5¾	5¾	6¼	6¼	7	7	7	7	ounces.

In the same way other percentage mixtures are made as the varying ages and capacities of the child require. The following table shows the working formulas which fit the average healthy child at the ages given:

Age—Weeks—	1	2	3	4	5	6
Top 4 oz. L 4 oz. of						
water .....	1	2	4	5	5½	6
10% Sugar Solution..	4	6	8	10	11	12
Plain Water .....	5	7	8	10	8½	9
Tl quantity required						
for 24 hours.....	10	15	20	25	25	27
No. of feedings daily..	10	10	10	10	10	9
Amount at each feed-						
ing .....	1	1½	2	2½	2½	3

In the earliest weeks of life, in order to get exceptionally low proteids, we use as our 10% fat mixture the top 4 ounces of cream from a quart bottle of milk, diluted with an equal quantity of water. After the third week we use the top 11 ounces.

See table at bottom.

Beginning with the tenth month we use whole milk, well mixed.

	10 Months.	10½ Months.	11 Months.
Whole Milk .....	26	30	32 ounces
10% Sugar Solu-			
tion .....	8	5	0 ounces
Plain Water.....	8	7	6 ounces
Milk Powder.....	one	one	one
	42	42	42 ounces

Give 5 feedings daily of 8½ oz. each at 6 A. M., 9 A. M., 12 noon, 3 P. M. and 6 P. M.

Shall the milk be pasteurized?

All market milk contains bacteria in variable numbers, the poorer the milk the larger the number of micro-organisms, but even in the best of milk the number of bacteria present is very large. Fortunately, most of these bacteria are of the non-pathogenic variety. There are found in the milk however, from time to time, bacteria of the pathogenic variety and the harmful bacteria most frequently met with are the micro-organisms of tuberculosis, typhoid fever, diphtheria, scarlet fever, dysentery, Malta fever and the pus organisms. Indeed, even the non-pathogenic bacteria, if present in very large numbers, are capable of causing diarrhoeal diseases in young children. As these bacteria when present are capable of causing severe individual sickness and at times extensive epidemics, their destruction by heat seems desirable.

Fortunately none of the ordinary bacteria found in milk has resisting spores and moderate degrees of heat are therefore sufficient to destroy them. Extensive experiments recently carried out (Rosenau Hygienic Laboratory, Bull. 42 January, 1908), show that milk heated to 60° C. (140° F.) and maintained at that temperature for twenty minutes may be considered safe so far as conveying infection with the microorganisms is concerned.

The ordinary method of pasteurizing the milk is to distribute the day's supply of food among the several bottles, stop each bottle tightly with cotton, set them in a pail, cover them with boiling water and allow them to stand for 30 minutes. Then transfer the bottles to cold running water for one hour and finally keep them near ice. Several good pasteurizers are on the market but they are not essential and an ordinary ten-quart pail with cover is sufficient for every purpose.

#### INTERVALS BETWEEN FEEDINGS.

Six hours after delivery the baby should be put to the breast and thereafter, for the first two or three days, whenever it is restless, this stimulates contraction of the uterus, stimulates the breasts, and helps the baby.

After the third day the nursing intervals should be regular, waking the baby if necessary. Up to the 6th week the baby should be fed every 2 hours during the day. From the 6th week to the end of the 4th month every 2½ hours. Beginning with the 5th month every 3 hours.

At 3 months the 2 A. M. nursing should be discontinued, the last feeding being given at 10 P. M. and at 10 months the baby should sleep from 6 P. M. to 6 A. M.

#### FEEDING DURING THE SECOND YEAR.

Before we can enter upon the second year's feeding, it is necessary that the breast fed child, if still nursing, should be weaned. This is best done at 10½ months. If, however, the weaning period happens to fall in the hot summer months and the baby is regularly gaining its four ounces a week and the mother is bearing the nursing well there is no particular reason why breast feeding should not be continued up to the end of the first year. Weaning, however, should never be done precipitately unless some urgent necessity makes it absolutely imperative.

Beginning with a mixture of cow's milk containing 2% of fat we gradually strengthen the milk mixture and progres-

sively add cereals, orange juice and bread and butter along the lines previously indicated. This brings us up to the 13th month when clear broths are given and thereafter additions are made each month until the close of the second year.

At 13 months we allow three days a week with the mid-day meal, a cup of clear broth (beef, mutton, chicken), without cereal or vegetable additions, with stale bread crumbs broken into it.

#### RECIPE FOR MAKING BROTHS.

1 lb. finely chopped lean meat, free from fat; 1 pint of cold water, and pinch of salt.

Cook 3 hours over slow fire down to ½ pint, adding water if necessary. Strain while hot through fine sieve and set aside to cool in an earthen vessel for 12 hours. Sulting jelly can be used full strength or diluted with water.

For mutton broth we use the neck or shoulder of mutton. For beef broth we use round steak or top sirloin. For chicken broth we use the whole chicken cut up fine, without the skin.

At 14 months we add to the mid-day meal plain milk puddings (rice, sago, tapioca), made without eggs, and in the proportion of ½ cup of washed rice and ¼ cup of sugar to the quart of milk.

At 15 months a starchy vegetable is given four days a week in the form of baked potato, boiled rice or macaroni (boiled ½ hour in water, then five minutes in milk and served with butter and salt).

At 16 months we allow green vegetables and cooked fruit.

#### DIET SHEET FOR HEALTHY CHILD 16 MONTHS OLD.

First Meal, 6.30-7 A. M.—Pasteurized milk. Bread and butter (toasted or plain). Cereal porridge with pasteurized gravity cream poured over it. 8.30 A. M.—Fruit Juice. The juice of half an orange squeezed from a cut orange into a spoon, the outside of the fruit having first been washed and dried.

Second Meal, 10 A. M.—Pasteurized milk to drink, 7½ oz.

Third Meal, 12.30-1 P. M.—Bread and butter. Three days a week clear broth (beef, mutton, chicken), with stale bread crumbs broken into it. Four days a week one starchy and one green vegetable together. Baked potato, boiled rice, macaroni (boiled ½ hour in water then 5 minutes in milk. Serve with butter and salt.) Creamed spinach, young Lima beans, crushed peas, asparagus tips, string beans,



stewed celery. Every day for dessert a plain milk pudding made without eggs (rice, sago, tapioca), or the soft part of a baked apple, or apple sauce, not too sweet; or one or two stewed prunes served without the skins and pressed through a collander.

Fourth Meal, 3. P. M.—Pasteurized milk to drink,  $7\frac{1}{2}$  ozs.

Fifth Meal, 5.30-6 P. M.—Pasteurized milk to drink. Bread and butter, dry buttered toast or unsweetened zwieback.

Cool water to drink during the day.

At 17 months may be given steamed Hubbard squash for dinner, hominy as a cereal, platter or dish gravy on slices of stale bread, cut thin, at the mid-day meal, and junket as a dessert.

At 18 months we add to the breakfast eggs and creamed potatoes; 3 days a week one soft boiled or poached egg; 4 days a week creamed potatoes made from potatoes previously baked and cooled, and cold mush and milk may be given with the evening meal.

At 19 months we allow graham bread, stewed apples and tapioca well cooked and served with pasteurized gravity cream.

At 20 months the diet is increased by the addition of meats, creamed onions and boiled beets.

#### DIET SHEET FOR HEALTHY CHILD AT 20 MONTHS.

First Meal, 6.30-7 A. M.—Pasteurized milk, bread and butter, cereal with pasteurized cream; 3 days a week one soft boiled or poached egg; 4 days a week creamed potatoes.

8.30 A. M.—The juice of half an orange.

Second Meal, 10 A. M.—Pasteurized milk,  $7\frac{1}{2}$  ozs.

Third Meal, 12.30-1 P. M.—Bread and butter. Three days a week a cup of clear broth (beef, mutton, chicken), with stale bread crumbs or Huntley and Palmer's dinner biscuits broken into it. Four days a week a tablespoonful of finely minced, broiled, tenderloin of steak or mutton chop. Every day one starchy and one green vegetable together, baked potato, boiled rice, macaroni, hominy or yellow corn meal, served with butter and salt; spinach, stewed celery, beet tops, green peas, boiled beets, lima beans, string beans, asparagus tips, creamed onions, steamed squash.

Every day for dessert a plain milk pudding made without eggs (rice, sago, tapioca), or baked apple, or junket, or stewed prunes.

Fourth Meal, 3 P. M.—Pasteurized milk to drink.

Fifth Meal, 5.30-6 P. M.—Bread and butter or unsweetened zwieback. Mush and milk. Pasteurized milk to drink, all they desire to go to bed on. Cool water to drink during the day.

At 21 months we allow, occasionally, a tablespoonful of fresh sweet Concord grapes, served without the skins and then seeded, in place of the orange juice.

At 22 months may be added the white meat of chicken or squab and corn starch (blanc mange), made without eggs.

At 23 months fresh fruit may be given, an apple, pear, peach, plum or apricot in season, and once a week home-made ice cream made without eggs and the ingredients boiled before freezing.

And the diet for the second year is finally completed at 24 months by the addition of creamed parsnips, lettuce with salt and fresh broiled or baked sea trout, sea bass, fresh mackerel or blue fish.

#### STATE SANITARY SUPERVISION.

Emerson, *Boston Medical and Surgical Journal*, September 17, 1908, refers to the statement of H. I. Bowditch in 1869 that: "The authorities of a state are bound to take care of the public health \* \* \* in order that each citizen may not only have as long a life as Nature would give him, but likewise as healthy a life as possible." Emerson discusses the history of the development of state sanitary supervision and considers the work of the state inspectors with special reference to city conditions—the supply of light and air, cleanliness of factories and workshops, proper removal of dust, ventilation and sanitary conditions of school houses and public buildings, the number and conditions of toilet facilities and the inspections of working minors; also the inspection of clothing made or repaired in tenement houses.

If a patient persists in running evening temperatures which cannot be accounted for after a thorough physical examination and blood examination, one should place the patient on increasing doses of the iodides, for the fever may be due to an old syphilitic infection.—*Amer. Jour. Surgery*.

Raising the foot of the bed twelve inches may combat shock more quickly than the repeated administration of stimulants, and, by the way, is far less harmful to the patient. One should remember not to use this means in abdominal cases where pus has been found in the peritoneal cavity.—*Amer. Jour. Surgery*.

## TWO CASES OF DEFORMITY OF THE WRIST ILLUSTRATING THE VALUE OF THE X-RAY AS AN AID TO DIAGNOSIS.

By Thomas W. Harvey, M. D.,  
Orange, N. J.

Case one, seen through the courtesy of Dr. R. H. Hunt, of East Orange.

Congenital absence of the lower end of the ulna associated with exostoses of the ulna and femur.

In the August number of the *Annals of Surgery*, Dr. Patterson, of Philadelphia, reports a similar case, and notes its rarity. This is the third case in the literature.

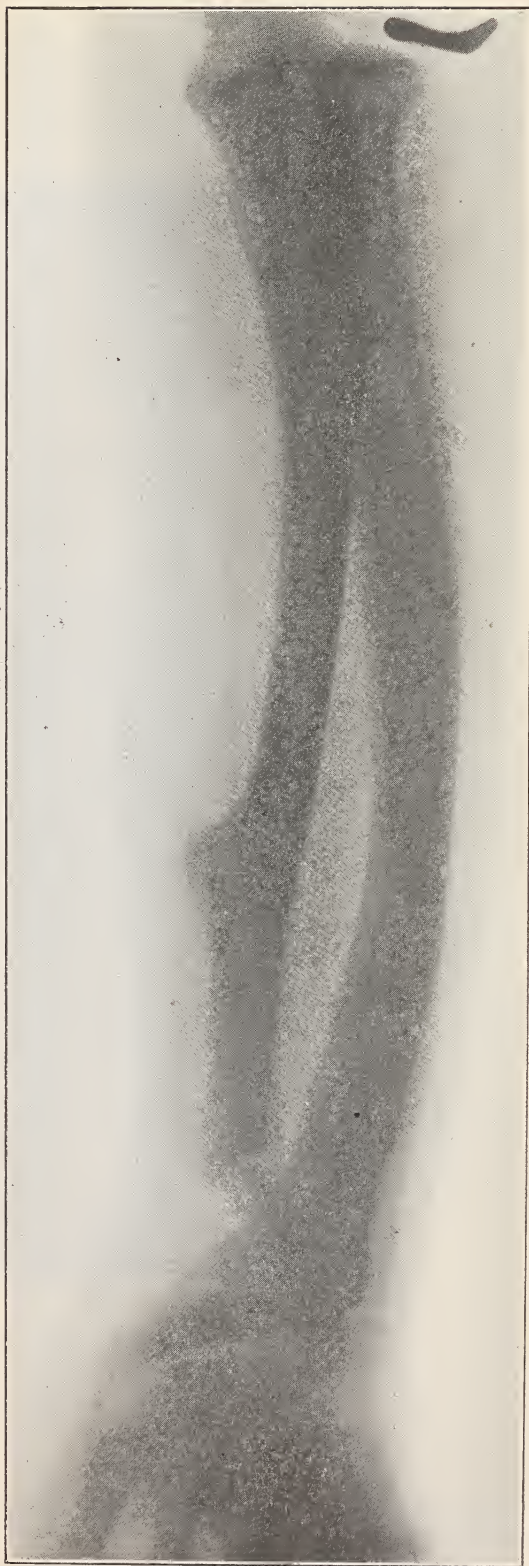
A young girl, age twelve, American parentage, presented an exostosis of the left femur which from its shape and growth was causing inconvenience and disability. Further examination demonstrated an exostosis of the left ulna and the fact that the left wrist was narrower than the right.

The accompanying radiograph shows the condition of the ulna. The picture was of special interest, because of the fact that about two years before the girl had sustained an injury to the shoulder from a fall, and when the weakness of the wrist and the growth on the ulna were first discovered the question was raised as to whether the forearm had not been broken at the fall and the injury had not been recognized. The radiograph clearly demonstrates the fact that the defect in the wrist is congenital and that the hyperplasia of bone, while it may have been due to traumatism, did not mark the seat of a fracture. It is interesting to note the exaggerated curve of the radius to accommodate itself to the shortened ulna.

The exostosis of the femur was removed but the ulna was not touched.

Case two is that of arrest of growth of the lower end of the radius after separation of the epiphysis.

The radiograph was taken of the right wrist of a youth of sixteen. At twelve years of age the boy sustained a Colles's fracture of the right wrist. Reduction was easy, union prompt and return of function complete. Gradually the deformity of the wrist developed and the outside of the hand pushed around. The radiograph shows the ulna longer than the radius, the bony deposit between the epiphysis and the end of the radius is indicated. Premature ossification has taken place.



CASE No. 2.

Congenital absence of the lower end of the ulna with exostoses.





CASE No. 2.

Arrest of growth of the lower end of the radius after separation  
of the epiphysis.

The boy said that the shape of the wrist facilitated his work as a baseball pitcher.

Separation of the epiphysis of the lower end of the radius is not an uncommon injury, but deformity due to arrest of growth is not so common.

Many cases, however, occur in medical literature, and Dr. Whaechter in the July Annals of Surgery gives a good bibliography. The value of the radiograph in such cases and its use to prevent suits for malpractice is very evident.



## SURGICAL AND MEDICAL CASES.

## Torsion of the Gall Bladder.

Reported by R. Muhsam, Berlin, in *Berliner Klinische Wochenschrift*, June 22, 1908.

The patient complained of symptoms simulating those of acute appendicitis or of acute cholecystitis. There was, however, no fever, but the white blood count was 20,000. Under anesthesia a small globular tumor was palpably opposite the umbilicus. Operation showed a densely congested gall bladder, the pedicle of which was turned around at an angle of 360 degrees. The organ was extirpated and the patient recovered. The contents consisted merely of dark blood; no calculus was present. The author has not been able to find a similar case reported in the literature.

## Collapse After Injection of Diphtheria Antitoxin.

Dr. F. W. Thomas, (*Jour. Amer. Med. Assn.*, July 4, 1908) reports a case of sudden collapse following the injection of 4000 units of diphtheria antitoxin into the subscapular region of a boy of fifteen. The symptoms described strongly suggest those caused by injection of air into a vein. Cardiac and respiratory stimulation and several more injections of antitoxin, none of them with unusual sequelæ, resulted in recovery.

F. L. Taylor (*Med. Rec.*, July 4, 1908) also records an instance of collapse after injection of 6000 units of grade 6a, Department of Health antitoxin in an adult. In ten minutes the patient complained of tingling and numbness in the extremities, then in the whole body. Pallor, cyanosis, frothy sputum, rapid and feeble pulse were succeeded by coma, involuntary defecation and apparently imminent death. Artificial respiration and injections of strychnine and atropine led to recovery, preceded by diffuse erythema and giant urticaria.

## Idiopathic Dilatation of the Colon, With Report of a Case in a Man of Fifty-six.

E. H. Stone, *Boston Medical and Surgical Journal*, March 26, 1908, reports a typical case, noteworthy merely because the patient reached the advanced age of fifty-six, and because at birth he had an imperforate anus. Whether the latter anomaly was the cause of the colonic dilatation, is, in the author's mind, a question. Idiopathic dilatation of the colon, or Hirschsprung's disease, as it is known among the Germans, occurs in the vast majority of cases, in males, and in more than half the reported cases it is first noticed in childhood. The genesis of this disease is entirely a matter of speculation. The clinical history is simple and unvarying; the patients come to the physician with an intense abdominal distension and a history of high-grade constipation for days or weeks. The symptoms disappear and reappear. The abdomen is found intensely distended, the abdominal walls are excessively thin, and through them marked peristalsis can frequently be noted. The liver dullness may be entirely absent and the heart is displaced upward. The respiratory rate is generally increased and marked cyanosis may occur. In the differential diagnosis, tuberculous peritonitis, phantom tumor and intestinal obstruction

must be considered. The prognosis as regards cure is bad; few patients live to adult age; death is due to volvulus, perforation, obstruction, toxæmia or exhaustion. The treatment is either medical or surgical. Medical treatment, while not curative, may prolong life for many years. Surgically these cases have been treated by resection, and by forming an artificial anus.

## A Study of Three Cases of Anemia in Children.

Dr. M. H. Fussell, of Philadelphia, Pa., reported these cases at the annual meeting of the Association of American Physicians:

CASE I. This patient was a boy, thirteen years of age. No venereal history could be obtained in either parent. The child had been breast fed, and during his entire life had had intestinal disturbances. When three months old he began to get pale and there was noted a tumor in his abdomen. Shortly before his death he had a marked enterocolitis. There was a very large splenic tumor. The boy died suddenly during an attack of vomiting. At autopsy all the tissues were found to be extremely palid and, with the exception of enlarged mesenteric glands and an enlarged spleen, there was absolutely nothing found pathologically. The blood examination showed thirty per cent. hemoglobin; 2,834,000 red cells, 56,400 whites. There was a 70 per cent. polymorphonuclear count, 6.8 per cent. small lymphocytes, 1.4 per cent. large lymphocytes, and 12 per cent. myelocytes. There were a few nucleated red cells. Histologically practically nothing was found except a hyperplasia of lymphatics in the spleen and enlarged lymph glands. There was some thickening of the blood-vessels. There was no sign during life or at autopsy of rickets.

CASE II. This patient was a girl, seven years of age. There was no history given except that the child had vomited blood a number of times. She had been weak and pale, and she entered the hospital with all the physical signs of anemia, with enlarged heart and marked presystolic and systolic murmurs. There was also fever. There was no leucocytosis. He thought there might be a septic condition of the endocardium. This patient died after a large hemorrhage from the stomach. Just before death the hemoglobin was 20 per cent., the red cells numbered 1,376,000, the whites 6,000. The polymorphonuclear count was 60 per cent. At autopsy the liver was found to be enlarged, pale, and pinkish. The spleen was large, pale, and smooth. At the cardiac end of the esophagus there were a number of dilated veins, and the bleeding occurred there.

CASE III. No history could be obtained in this case, except that the child had suffered for three months. The patient was lemon-colored, and she gave distinct signs of rickets. The spleen was very large, reaching to the symphysis. The liver was left one-half way between the xiphoid and the umbilicus. The hemoglobin was 24 per cent., the reds numbered 1,600,000, the whites 24,160. The polymorphonuclear count was 40 per cent., the small lymphocytes 4 per cent., and there was 2 per cent. the small lymphocytes. The spleen capsule was trabeculated, but not increased in thickness or density. The Malpighian bodies were small. The lymph gland follicles were large. There was a slight endothelial increase. There was a moderate fat infiltration, especially in the periportal area. A cellular infiltration was found in the kidneys.—*Medical Record*, Aug. 8, 1908.



**Preliminary Report of a Case of Resuscitation  
of the Heart by Sub-Diaphrag-  
matic Massage.**

By Charles S. White, M. D., Associate in Surgery, Emergency Hospital, Washington, D. C.

The possibility of re-establishing the function of heart muscle, after paralysis by chloroform, by massage has a practical application, and the reports of three successful cases by Igelsrud, Ch. Lenormant and Cohen, were the basis for the attempt in the case reported below:

J. D., male, 12 years old; diagnosis, popliteal abscess following infection of foot; one month duration. The heart sounds were normal. Chloroform had been administered 15 minutes when the patient was brought into the operating room. The knee was carefully cleansed, consuming about 10 minutes. As the operation was about to proceed it was noticed that the child was not breathing. The anesthetic was stopped and *not* resumed later. The pupils were widely dilated, the color pale, not cyanotic. Pressure was made on the chest five or six times, but respiratory movements were not visible. The pulse could not be felt by the anesthetist. The patient was immediately placed in the Trendelenburg position, the tongue and jaw drawn forward, and artificial respiration practiced by the Laborde and Sylvester methods. Strychnia, gr. 1-40, was given hypodermically. These methods were kept up more than five minutes, actual time, though it seemed much longer, and at no stage could I or any other person present feel the pulse. Cocaine, 25 minims of a 2 per cent. solution, was given hypodermically.

At this juncture life seemed extinct and more heroic measures were thought justifiable. Accordingly the abdomen was opened from the ensiform cartilage to the umbilicus, and the hand inserted above the stomach and under the diaphragm. The heart could be easily felt through the flaccid partition. With the left hand on the thorax, over the heart, the fingers of the right hand compressed the heart about 25 times per minute. The sensation to the hand was similar to that imparted by a movable kidney.

After about one minute a feeble tremor could be felt. Strychnia, gr. 1-40, was given hypodermically at this time. The massage was continued, and very soon rhythmical pulsations could be felt against the fingers, and assistants then detected a feeble pulse at the radials. After seven

minutes the apex beat was distinct and at the rate of 120 per minute. The abdominal wound was closed, the abscess opened and drained, and the leg placed in plaster. The operation was completed at 1 P. M.

At 2 P. M. the patient had a convulsion, lasting not over a minute, tonic in nature. This was repeated at 3, and at 5 he vomited, and at the same time had a mild spasm. The convulsions were very much of the strychnia type, any little irritation setting up rigidity. Bromides, chloral, and small doses of morphia were used. The pulse gradually became accelerated, the temperature rose to 105 before death and the spasticity was replaced by profound coma. He died at 9 A. M. on the day following the operation, or 20 hours after resuscitation. In some respects the symptoms simulated acetonemia or acidosis, but both acetone and diacetic acid were absent from the urine.—*Maryland Medical Journal*, September, 1908.

**Hydrocephalus of Meningococcic Origin—The  
Serum Treatment—Mortality Record.**

Drs. J. H. Mason, Jr. and F. J. Sladen, of Baltimore, reported the following cases at annual meeting of the American Pediatric Society, as noted in the *Medical Record* of September 26, 1908:

CASE I.—This was a child of five months who had been perfectly normal at birth and for two months afterwards, when a marked gastroenteritis was developed which lasted seven weeks before the doctor saw her. At this time she was seized with general convulsions, followed by vomiting and fever. After two weeks these symptoms abated, retraction of the head was noticed, and the typical pressure symptoms of meningitis were found to be present. There was the bulging fontanelle with the bones of the skull separated and sutures gaping. The circumference measured 44 cm. One hundred c.c. of a slightly turbid fluid was removed in which a rather small number of organisms were found. There were numerous pus cells present. The child did well for a few days, but at the end of a week a second puncture was done and a similar amount of fluid removed. The family refused to have the serum used. The child improved for about a month, but a few weeks after died quite suddenly. Autopsy was refused.

CASE II.—This patient was a child six months of age, who had been taken to a milk dispensary in Baltimore, where it was noticed that the child was markedly emaciated, with retracted head; the head was evidently hydrocephalic with bulging fontanelles. There was no history to account for the condition. The child was said to have had a fall. The left side of the head bulged more than the right. The case did not seem to be one of typical hydrocephalus and a tumor with pressure symptoms was suspected. A lumbar puncture with a dry cut was done. A ventricular puncture was then done and 20 c.c. of slightly turbid fluid was removed. A large number of meningococci, both extracellular and intracellular, were found by

the pathologist. He learned that four months previously the child would awaken at night and moan as though in great pain. It had frequent convulsions and cried constantly. The eyes were crossed. The head had begun to increase in size about five weeks before admission and measured 46.5 cm. in circumference. The head was retracted and the neck held stiff. A second lumbar puncture yielded no fluid. Five intraventricular punctures were made which the child stood very well. He ran a temperature of from 97 to 101 degrees, respiration from 24 to 40, and pulse from 100 to 150. The child finally collapsed and died. There was a lessening of the number of cases of hydrocephalus as a result of the use of serum treatment.

CASE III.—This was a boy of fifteen years, who had been ill for ten days before having been seen. He was found in the typical posture of meningitis, was delirious and unconscious. There were six punctures made and a turbid fluid obtained. There was an improvement when treatment was instituted. Marked strabismus existed and otitis media developed and paracentesis was done on both membranes.

CASE IV.—This child was seven years of age, and was seen rather early in the disease. He received two doses of serum. The patient began to convalesce and was discharged on the thirty-fifth day of the disease.

Drs. Mason and Sladen give the following mortality records: There were 33 cases before this year, of which 21 died and 12 recovered, giving a mortality of 64 per cent. The lowest mortality occurred in 1899, when it was only 23 per cent. In 1899 they began to use lumbar puncture. During the last four and one-half months 21 cases had been admitted which were treated by lumbar puncture and intraspinal injections. Three died and 18 recovered. This was a mortality of 14 per cent. The three cases that died were of very virulent type. Twelve cases were under 12 years of age, 11 died and one recovered. Of ten cases seen previous to this year and under 12 years of age, four died and six recovered. Most of the cases were temporarily upset by the injection of the serum.

### The Serum Treatment of Epidemic Cerebrospinal Meningitis.

Dr. F. S. Churchill, of Chicago, reports the following cases, as given in the *Medical Record*, September 26, 1908. His paper gives 11 cases, 9 of which were meningococcic in type. Four of the 11 died. The following are the cases that recovered:

CASE I.—This patient was a boy, sixteen years of age, who was seen on the sixth day of the disease. The first puncture was made on this day without any effect upon the temperature. The following day the serum was again injected and a decided drop in temperature followed, together with a cessation of the symptoms by lysis. Twenty c.c. was the dose given. The leucocytes persisted and the count which was at first 15,000 ran as high as 20,000.

CASE II.—A boy sixteen years of age, who was seen on the second day of the disease, with a temperature of 102 degrees. When the puncture was done it was 106.5 degrees. A drop in the temperature followed the puncture, but it rose again later. Then three doses of serum were given suc-

cessively. The temperature then dropped and did not again rise. The leucocyte curve had a varied course.

CASE III.—A girl of nine years, who had a very severe attack. A puncture was done on the first day of the disease, with a marked drop in the temperature. The serum was injected on the second and fourth days in 30 c.c. doses. This case terminated in what Dr. Flexner called a crisis.

CASE IV.—A boy, nine years of age, who was admitted to the Presbyterian Hospital on the twenty-first day of the disease. The serum was given every other day in 15 c.c. doses. On the twenty-ninth day there was a jump in the temperature, the leucocyte count, and a corresponding increase in the leucocytes in the cerebrospinal fluid. The clinical picture of the child showed a general increase. Three successive doses of the serum were given and the temperature returned to normal. Although this was a chronic and very persistent case, the patient made a complete recovery.

CASE V.—A woman, treated at the County Hospital, upon whom lumbar puncture was done on the twenty-first day of the disease. The temperature dropped, but soon rose again. After being in the hospital for five days, with the temperature constantly up, 30 c.c. of the serum was given, and this was accompanied by a drop in temperature without a subsequent rise. After using the serum there was also a drop in the leucocytic count.

CASE VI.—This patient was a Greek, nineteen years of age; and entered the hospital on the first day and the serum was injected on the second and fourth days, respectively, 30 c.c. of the serum being used. There was a fall in temperature after the injection, but a rise on the following day. The leucocytic count gradually fell to the normal. A lordosis made the spinal puncture a difficult procedure.

CASE VII.—This was a child of ten years, having a very severe attack. The child appeared to be very ill. For three days successive doses of the serum were given, with good results on the temperature. The patient continued to run a leucocytosis 29,000, 16,000, then up to 25,000. A careful examination failed to account for this leucocytosis. Dr. Churchill said there was a general improvement following the administration of the serum. This improvement followed after the second or third dose. The mental condition showed marked improvement.

Dr. Churchill said it was interesting to see children with marked retraction of the head still much interested in their surroundings. There had been a decided drop in the number of leucocytes in the fluid at the time of the second, third and fourth injection. There was a corresponding drop in the number of diplococci. This had been constantly noted. All the patients excepting two recovered without sequelæ. One patient had a mild nephritis when he came in, but he left the hospital apparently well. Another case ran a leucocytosis for which they could not account. Dr. Churchill believed that it was obligatory to do a lumbar puncture if one had a case of meningitis. The serum should be injected at once, and the form of meningitis that one was dealing with could be determined later. It was important to increase the dose day by day until one obtained good results.



## ITEMS FROM MEDICAL JOURNALS

## PSYCHOTHERAPY.

Dr. A. M. Stuart says that every skillful physician must be a mind healer or he will not succeed, no matter how great his knowledge of disease. He considers the patient's mind in everything he says and does. The author discusses the mental healing of Mesmer and the more accurate and scientific work of Charcot. He then considers the Emmanuel Church movement and the work of Dubois of Bern. The latter he considers as superficial and non-scientific. "He has an eye for just one thing—a neurosis. He admits that even if he discovers tuberculosis he ignores it, because otherwise he would weaken his power of cheerful suggestion. \* \* \* He objects to methods of exact diagnosis on the ground of their increasning the fixed ideas of the patients. He admits the necessity of surgery for appendicitis and similarly serious troubles, but he scoffs at medication, calling it a bungling form of suggestion, practised because the public has been trained to it. The effect on the general public of this latest claim on the part of the clergy of the power to cure disease by suggestion is, the author thinks, liable to lead to a most unfortunate state of mind on the part of the general public, who will lose its faith in legitimate medical therapy. He thinks that the clergy have a most important responsibility in this matter and fears that many of them will indulge in a most unfortunate dabbling with disease. They will assume control of cases they have no business to touch. "If," says he, "a minister was really anxious to ameliorate the suffering of humanity, I could educate him in a week. I should like him to spend that week in a large children's hospital and live among the little crippled bodies and wizened yellow faces of those innocents slain from their birth, who shall never come out of tribulation, for they are destined to bear the burden of all the sins and ignorance and greed of our society. There let the minister ask and answer his questions as to the actuality of disease."

**Rest Treatment in Relation to Psychotherapy.**—Dr. S. Weir Mitchell, of Philadelphia, read this paper at the annual meeting of the American Neurological Association, May, 1908, and said that he had invented the rest treatment in 1874, and in 1876 had written a book on the subject, which was soon translated into seven foreign languages. The treatment was not used by others until 1877,

when it was administered by Dr. William Goodell. In 1879 it was utilized by Dr. Playfair in England. He had no reason to complain of the reception of the method of treatment by the profession at large, but many unfair criticisms of it had been made by eminent men, who ought to know better. The good effects were assigned to various influences, some of which did not even form part of the method. Dubois had been an especially unfavorable critic of the Weir Mitchell treatment, a fact which grew out of Dubois's failure to properly understand the method. Dr. Mitchell quoted from this critics writings to show that his strictures were not warranted. Charcot had claimed priority for isolation, but Dr. Mitchell asserted that he was the first to make use of this measure in the lesser neuroses. The rest treatment was especially adapted to the treatment of neurasthenia, hypochondria and hysteria. Neurasthenia might be, and often was, a purely physical affection, and psychotherapy would do distinct harm in such cases. Pure hypochondria was a mental disease, but it was rare. Absolutely nothing was known of hysteria. He believed the clergyman could often give material aid to the physician. Hardly a week went by that he did not seek the assistance of the clergyman in the treatment of a case. However, no organic disease could ever be relieved by influence exerted upon the mind. Some conditions, as masturbation, irritable temper, and kleptomania, were at times favorably influenced by inflicting bodily pain, and Dr. Mitchell sometimes resorted to this measure. Hypnotism was not largely used in the treatment of disease.

Dr. F. X. Dercum, of Philadelphia, said the rest treatment was certainly original with Dr. Mitchell, and that the only remarkable fact about the method was that it made use of simple physiological means. The danger in the newer methods of so-called psychotherapy was that they would be used to the neglect of physiological means.—*Medical Record*, September 5, 1908.

**Psychotherapy.**—Mills, in *Monthly Cyclopaedia and Medical Bulletin*, discusses hypnotism, suggestion without hypnosis, educational or reasoning methods, the light shed by psychic medicine on the nature of disease, limitations of psychotherapeutics, and religion and psychotherapy. In regard to the last point, now being much discussed, he says: "I repeat, therefore, that psychotherapy, like medicinal or mechanical or surgical or climatic or any other sort of therapy, belongs to the physician and not to the clergyman; however sincere the latter may be in his idea that it is his duty to invade the province of his medical brother."

## ACUTE ANTERIOR POLIOMYELITIS EPIDEMIC.

Dr. M. Allen Starr (*Jour. Amer. Med. Assn.*, July 11, 1908) presents a study of the epidemic of about 2,000 cases of acute anterior poliomyelitis occurring in New York and vicinity during the summer of 1907, with a mortality of 6 to 7 per cent. The onset of the disease was uniformly accompanied by a brisk febrile movement, temperature rising to 101 to 103 in the first

twenty-four hours; sometimes by a slight chill; usually by vomiting, malaise, general sweating, general severe pains in the limbs and in the back, sometimes attended by some rigidity of the spine and even retraction of the head, and excessive sweating. Diarrhea frequently followed on the second day and continued for two or three days. Delirium was a common accompaniment of the fever on the second or third day. The febrile movement lasted from five to nine days in the majority of the cases. It was rarely attended by very high temperature, and even in the fatal cases temperatures above 104 were the exception. On the third or fourth day of the disease the paralysis was discovered, though it may have developed a little earlier. It usually appeared suddenly and at its maximum extent from the beginning. The picture was, in some cases, that of poliomyelitis of the ordinary recognized type; in other cases, of poliomyelitis with bulbar paralysis; in other cases, of poliomyelitis with polioencephalitis of Wernicke. In a few cases the children were affected by true infantile hemiplegia. In fatal cases death occurred from respiratory paralysis or heart failure. The acute onset usually subsided in the course of a week or ten days and a state of improvement was noticed, beginning at the end of the second to the fourth week. This improvement has continued up to the present time, and, as a rule, such is likely to go on for two years. In many cases a complete recovery has ensued. The frequency of abortive cases was unusual as was the high mortality of about 7 per cent. The writer gives a synopsis of a bacteriological study from the Rockefeller Institute for Medical Research and original abstracts of the accounts of 44 epidemics. From study of those he says that in fatal cases death usually occurs between the fourth and tenth days, generally through involvement of the respiratory muscles. The prognosis is always serious while the disease is advancing or while the paralysis is extending, especially as it extends upward. If a child survives the eighth or tenth day, prognosis for life is favorable. In 25 per cent. of epidemic cases there is complete recovery. In sporadic cases a few muscles usually remain paralyzed. During the early stage of the disease dry cupping of the back, for a short time only, two or three times a day, may relieve the congestion. Ice bags applied to the spine may have the same effect, and sponging with cool water or alcohol may decrease the fever. Acetanilid, anti-

pyrin or phenacetin, with Dover's powder, may be given to relieve pain. Five grains of urotropin may be given every four hours to a child of 8 years during the acute stage. Some give salicylate of soda. After the stage of onset is over and the pain has subsided it is wise to stop medication for two weeks and then begin the use of strychnin, which should be pushed as far as is consistent with safety. The condition of the muscles may be improved by manipulation, massage and friction with oil or cocoa butter, or allowing the child to play daily or twice a day in a warm bath for half an hour or more, or by applications of galvanism, both constant and interrupted. It is especially important from the very beginning to prevent the development of deformities by carefully adjusted braces when the child is out of bed and by properly adjusted pillows and little sand bags to hold the feet in position when the child is in bed.

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#### EARLY SYMPTOMS OF THE RECENT EPIDEMIC OF POLIOMYELITIS.

Dr. L. E. LaFétra, of New York, at the recent annual meeting of the American Pediatric Society, presented this paper. He said that the recent epidemic had furnished the opportunity of seeing many cases of poliomyelitis in which the symptoms presented were not those that occurred in the ordinary conception of this affection. From sixty-three cases the following suggestive histories were obtained. In twenty-five cases vomiting occurred; in fourteen constipation was present; in seventeen, diarrhoea; in six, cough, tonsillitis, and sore throat; in fifty-two cases there was fever. This symptom was probably present in all cases. It generally lasted from two to three days. Restlessness and irritability occurred in thirty-seven cases, delirium in two cases, and convulsions in four cases. Rigidity of the neck occurred in eleven cases. Babinski's sign in three cases at the Babies' Hospital; in ten cases atrophy was present; in four stupor; in ten headache, and in three photophobia. In thirty-two cases there was pain and tenderness in the affected limb. In fifty-eight cases the paralysis was flaccid and in five spastic. The paralysis came on early in the course of the disease. In one case opisthotonos existed for five days, and in another for ten. In one case there was general anesthesia. In two cases there was unilateral paralysis of the abdominal obliques. Lumber puncture was done in fourteen cases, and from 15 to 70 c.c. of fluid removed. In every instance the fluid was clear. In only two cases were cells and mononuclears found. It was exceedingly difficult to diagnose this disease in the beginning of the epidemic. It was especially confusing when acute meningitis was attended with pronounced irritative symptoms.—*Medical Record*.



## AFTER-TREATMENT OF LAPAROTOMIES.

Max, Jerusalem (Munch. Med. Moch., May 26, 1908) considers the treatment of the painful symptoms that often remain after otherwise successful laparotomies. He believes them to be due to adhesions of the various organs, especially the intestines. These frequently occur when primary union does not take place and the wound must be drained. Phophylaxis is believed to consist in keeping the intestines from remaining quiet, morphine no longer being used. Diet is full from the first day, oil injections are given and subcutaneous injections of physostigmin. High injections in the knee-elbow position, injections of air, energetic massage and faradization of the abdomen are given to stretch the adhesions. The author has made use of the Bier suction glass in a series of cases with excellent results. On the third to the fifth day an oval bell-glass is placed over the laparotomy scar for from fifteen to twenty minutes. The skin becomes red, and the patient feels a comfortable sensation of warmth, and after the removal of the suction the pressure feeling is less. After from six to twenty-two sittings the painful symptoms have all disappeared, and where resistance was felt, all is soft and supple. Obstipation is relieved. The author gives histories of twelve cases treated in this way. All the patients were very willing to undergo the treatment and expressed themselves as satisfied with the results. The relief may be due to hyperemia or to the mechanical action of the force applied by the vacuum.—*Amer. Jour. of Obstetrics.*

## PNEUMONIA IN CHILDREN.

Dr. G. H. Melville Dunlop analyzes five hundred cases of pneumonia that he has seen in the hospital. Of these 147 were of the lobar variety, the rest of the broncho-pneumonia type. Of the 147 cases 85 occurred in boys, 62 in girls. An immense majority of the cases occurred during the winter and spring months. There were 45 cases under two years of age, 42 between two and five years, and 60 between five and twelve years. The left base was affected in 63 cases, the right base in 25, the right apex in 23, the left apex in 11, both lungs in 8, whole of one lung in 10, and the site not ascertained in 7. The late development of physical signs is of frequent occurrence. The chief symptoms observed, heralding the onset of pneumonia were vomiting, headache, pain in the side, shivering, convulsions and diarrhoea. Vomiting in nearly two-thirds of the cases. Pain was more often referred to in the abdomen than in the thorax. Convulsions do not occur so frequently as an initial symptom as is generally supposed, and very rarely occurred in

children over two years old. In none of the 25 cases in which delirium occurred was the child under three years old. Herpes occurred in 11 per cent. of the cases. The crisis took place on the second day in 2 cases; on the third in 3 cases; on the fourth in 6 cases; on the fifth in 16 cases; on the sixth in 15 cases; on the seventh in 16 cases; on the eighth in 22 cases; on the ninth in 14 cases; on the tenth in 10 cases; on the eleventh in 7 cases; on the twelfth in 3 cases; after the twelfth in 6 cases. Of the 147 cases 24 terminated by lysis. Out of 147 cases 15 have died, being a mortality of 10.2 per cent. Below the age of two years the prognosis is grave, but above that age it is exceedingly favorable. There were 353 cases of broncho-pneumonia, of which 120 were primary and 233 secondary. There were 182 boys and 171 girls. Of the 120 primary cases, 92 occurred in children under two years of age. He was guided in differentiating these cases from lobar pneumonia by (1) the more disseminated character of the lesion in the lung; (2) the remission in the temperature; (3) the greater amount of cyanosis and dyspnea; (4) the more troublesome character of the cough. In analyzing these 353 cases of broncho-pneumonia he finds that both lungs were affected in 182 cases; the right lung alone was affected 83 times, the left alone 72 times, and in 16 the site was not stated. Death was generally due to one or the other of the following causes: increasing exhaustion; suffocation and toxemia, owing to the bronchi becoming blocked and the lungs choked; heart failure. He was struck with three points in connection with the cases that terminate fatally: (1) The large number of cases that die very suddenly of heart failure; this occurred in 23 of his cases; (2) the tendency of the temperature to mount higher and higher as death approaches; this occurred 31 times in the 89 cases of death; (3) the great liability of the child to die during an attack of general convulsions, which termination occurred 10 times. The following are the chief points to be considered in estimating the prognosis: 1. The primary disease; those cases which occurred after whooping cough, measles, and diphtheria were exceedingly fatal, giving a death rate of 54.4 per cent. 2. The younger the child the worse the prognosis; 64.4 per cent. of the deaths occurred in children under two years. 3. The greater the extent of the lungs involved the less is the chance of recovery; in 75 per cent. of the deaths both lungs were affected. 4. The poorer the previous health of the child the graver the prognosis. 5. When the child suffers from severe forms of rickets the prognosis is always grave. In 34 per cent. of the deaths the report states that severe rickets existed. 6. Diarrhoea seriously affects the prognosis, and was present in 24 per cent. of the deaths. 7. A temperature of 105 degrees Fahrenheit greatly adds to the gravity of the case; 60 per cent. of these cases died. A pulse rate of over 180 and a pulse-respiration ratio of 1 to 2 or 1 to 1.2 is always serious. 9. The highest mortality was in the cases which had lasted for several weeks. The indications for treatment are, first, to endeavor to prevent the digestive organs becoming deranged; second, to do all in your power to maintain the strength and vitality of the patient; third, to keep the action of the heart constantly under observation; fourth, to prevent, if possible, the spread of inflammation to fresh portions of lung.—*Medical Record*, September, 1908.

### THE TONGUE IN DIAGNOSIS.

Much may be learned says Dr. Post from accurate observation of the tongue; how much a few very old practitioners perhaps alone can tell. In the treatment of phthisis, inspection, minute and scrutinizing, of the tongue is far more important than the wielding of the stethoscope, however skillfully done. The ear gives us much information as to the amount and nature of the disease, the eye gives information, often priceless, as to the precise line of treatment to be adopted; for the tongue is the index of the state of the intestinal canal, and, if the *primae viae* are disordered, they must be put right before any other therapeutic measure can be safely adopted.

Tremulousness of the tongue may denote alcoholism; and, less frequently, lead or mercurial poisoning. This same condition may also denote muscular weakness. When seen in the early stages of typhoid fever, it indicates a grave condition of bad prognostic omen. In hemiplegia the tongue, when protruded, turns its apex to the paralyzed side. Dryness of the tongue is found in toxemia, pyrexia, diabetes and other forms of polyuria. It is swollen and indented in debility, menorrhagia and acute prostration. Usually a furred or coated condition of the tongue denotes disturbance of the digestive organs or the oncome of acute disease, especially the specific fevers.

As a rule index of the condition of the gastrointestinal canal the state of the tongue furnishes valuable information. Where the coat is thick, it is evident that absorption of food from the intestines must be very imperfect through the layer of dead epithelial cells, and our efforts must be directed toward removing this obstructive layer. When the tongue cleans, then we know that absorption and assimilation is going on satisfactorily. When the tongue remains coated, we aid the natural efforts to remove the fur with a mercurial laxative, best united with some vegetable cholagogue, as podophyllin or iridin followed by saline laxatives, and repeated to effect. In scarlet fever the tongue often assumes a strawberry appearance. In almost every case of indigestion with a furred tongue constipation is present, and must be considered in the therapeutic plan.

The raw, or bare, tongue is a condition that, I am afraid, does not often receive the consideration which, from its gravity, should be accorded to it. Here the superficial structures of the tongue are denuded, more or less completely, of the natural epithelium. Both in acute and chronic conditions the absence of the epithelial covering, whether slight or considerable, should receive the keenest attention of the practitioner. As long as the tongue is raw or bare, the line of treatment to be followed is that of bland, unirritating food, with alkalies and sedatives to the gastrointestinal tract such as bismuth, etc. As long as this condition remains, tonics are useless and are not assimilated. It is comparatively easy to get rid of the layer of dead epithelial cells of the coated tongue, but it often taxes all our resources to restore the epithelial coat to its integrity when the tongue is raw.

The surface of the tongue must be observed. The fissured tongue points to chronic disease usually, probably a lesion of the kidneys, inflammatory in character. This condition must be distinguished, however, from the fissured condition which occurs in the tongue of those persons who

habitually take all their drinks hot. Deep fissures or plaques are suggestive of syphilis. In certain cases of menorrhagia there is a peculiar silvery sheen and the tongue is broad and swollen.—Dr. W. C. Post, in *Amer. Jour. Clinical Medicine*, September, 1908.

### NEW PATHOGNOMONIC SYMPTOM OF APPENDICITIS.

Dr. Illoway, in *Archives of Diagnosis*, describes a sign which he has come to look on as pathognomic of appendicitis, as follows:

It is elicited in this manner: The patient is placed at full length on the operating table or chair for the purposes of examination. This is made in the usual way, and when all the data have been obtained the patient is told to flex the leg on the thigh and the thigh on the trunk. The physician then asks if the movement, or rather the upward pressure thus made, cause any pain or soreness in the lower portion of the right half of the abdomen, that is, the appendicular region.

If the answer is "no," or "very little," the physician flexes the thigh more closely, more forcibly, on the trunk, or directs the patient to do so, and again inquires if it causes pain or soreness or increases the pain or soreness. The patient is then told to extend the leg to full length with a quick and rather sudden movement and is asked if this has caused any pain or soreness. If either of these movements has caused any appreciable pain or soreness, the patient is directed to execute the same movements with the left leg and to compare the sensation produced as to whether it is any different from that caused by the right leg or is the same on both sides. Illoway has found that invariably (and in a number of instances this has been verified by a subsequent operation) only when appendicitis was present, whether as the primary malady or as a secondary involvement, did the flexion of the thigh on the trunk give rise to a feeling of pain or a sensation of soreness—deep down (as the patient would say), and even when this was not so marked the rapid extension would cause an accentuation of it.

It may happen that the more forcible flexure of the thigh on the trunk may cause some slight pain or soreness, but if this is not due to appendicitis there will be no pain or soreness on extension. It is the pain, or even soreness, produced both on flexion and extension—and he lays the greater stress on the extension—that he regards as a positive and unfailing sign of the presence of appendicitis.

### CRIMINAL ABORTION.

*From the Kansas Medical Journal, August, 1908.*

The time was, and not long since, when altogether too many of the reputable members of the profession looked with more or less indifference upon one of the most heinous crimes known to the civilized world, that of criminal abortion. Since a more thorough medical organization has been established throughout the country and a better knowledge of the principals for which organization stands has been dis-



seminated, there seems to be an awakening of sentiment in opposition to this enormous offense against law and morality. It might appear to some that this criminal practice is on the increase on account of the more frequent notices of criminal prosecutions appearing in the daily papers but relatively speaking this is not true. As population increases and becomes more dense the greater is the demand for criminal acts of this kind and it is too often met by the mercenary and disreputable element of the profession who are either opposed to, or have no just place among the organized profession. That prosecutions of this class of practice are on the increase there is no doubt but that to medical organizations is due the credit is evidenced by the fact that the most potent influence in this direction is always exerted by the members of our medical societies.

County societies should heartily join hands with the legal authorities in helping to stamp out this crime, for we owe it not only to society at large but to the reputation of the profession which is our duty to uphold.

J. E. S.

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#### JURY TO DETERMINE IF OPERATION WAS JUSTIFIABLE.

*From the Journal of the Kansas Medical Society, August, 1908.*

How is this? It is reported that a coroner in London impanelled a jury to determine whether the operation was justifiable which resulted in the death of a patient.

Sir Victor Hosley was summoned as a witness in the case. There is need of such a jury at times. There are, no doubt, human lives sacrificed almost daily from unnecessary, uncalled for, and bungling operations. Too many operations are done, operations that are too radical. There should be more conservatism.

This charge will not hold against the better class of good physicians and surgeons. By good is meant by those who are conscientious and skilled in the profession. It does apply to fakirs both outside and some who are recognized in profession, and especially the latter class bring a stigma on the whole profession. It creates a doubt in the mind of the laity when they know of operations being needlessly done, and sometimes ending fatally, whether any operation should be done, and often delay has been fatal because of such an experience of meddlesomeness on the part of the so-called surgeon. For example, what a frightful appearance an injured eye may present and

yet be saved. On the other hand, an eye should be removed at times when to all outward appearances there is but little showing of injury or disease. In the first case, the unscrupulous fakir has clear sailing. From the appearances of the eye to the patient and friends, consent is readily given to enucleate the eye which could be saved if, at least, an effort made to save it. For there is no danger in ten days or two weeks delay in such cases. But there is more money in an enucleation, to the scoundrel. There is a greater name and honor in operating. There is less labor, and altogether the unscrupulous man has greater financial interest in doing the least and getting the most for it. The mutilation of the patient does not affect him.

In the other case, when the physician or surgeon knows from the failing sight of the injured eye, and the slight scleral or circumcorneal zone of redness and the dread of light in the uninjured eye, the damage through sympathetic inflammation and loss of sight of the good eye, that the offending eye should be removed, the patient and friends hesitate until it is too late and the irreparable mischief is done; because some fakir has destroyed their confidence in an unnecessary, uncalled for operation on some friend or acquaintance.

What is the remedy? Publicity. The public is more or less aroused, as indicated by the London coroner's action. But the exposure should be made by the profession. Half of the jury at least should be composed of reputable physicians, and after a careful deliberation justice could be meted out. Such a course would tend to check this indiscriminate operating. More lives would be saved and fewer people go through life maimed and mutilated.

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#### RELATION OF MEDICAL MEN TO HOSPITALS. Editorial in *American Medicine*, Sept., 1908.

The hospital problem is bound to call, in the near future, for serious attention on the part of thinking medical men. No one can deny that the development of medical eleemosynary institutions has been largely responsible for the progress of medical and surgical science. But coincidental with the growth of the hospital idea, grave dangers to the rank and file of the medical profession have appeared. In most communities, wherever one finds a hospital, there also will one find a small *clique* of medical men enjoying special advantages and privileges by virtue of their hospital connection. Their

less fortunate and influential colleagues are denied these advantages, and are proportionately handicapped in the practice of their profession. Since to send patients to such institutions is tantamount to losing their patronage nine times out of every ten, the "outside" practitioner naturally discourages hospital treatment except as a *dernier ressort*. A case, even though a charity one, may be exceedingly interesting and the attending physician may wish to gain all possible experience from its observation and study. If he is not a member of the hospital staff, however, his connection with any case ceases when it enters an institution. All these things tend to defer the well recognized benefits to be derived from hospital regimen, and it is a notable fact that hospital cases are usually advanced—not infrequently too far advanced. Therefore, if hospitals have not fulfilled their most complete function in any community, the reason can usually be found in rules which confer special advantages on a few medical men and rigorously deny any privileges to those outside the "charmed circle."

No reflection is intended on those fortunate medical men who hold hospital appointments. With rare exceptions such men are well chosen, they are capable and honorable, and would scorn to purloin their colleagues' patients. But there are psychological factors involved in the treatment of a patient in a hospital by a physician or surgeon enjoying the prestige of official appointment, and any patient who passes successfully through the ordeal of a surgical operation or serious illness, is pretty apt to focus his gratitude, regard and confidence on the medical man who attended him. This is natural and involves no wrong, but when the attending physician or surgeon is an active competitor of the colleague who sent the patient to the hospital, to have the patient forsake the old for the new, not only creates a difficult ethical situation, but works a hardship on the original physician. Had the latter had the same opportunity, in all probability he would have equally proven his skill and worthiness.

Another objectionable feature of limited staff appointments is found in the fact that too few men can have access to the opportunities afforded by hospitals for increasing individual proficiency in the technic of diagnosis and treatment. Such a system therefore tends to elevate the few at the expense of the many, whereas the ideal professional situation in any locality is a community of interest with "equal rights for all and spe-

cial privileges to none." The practice of medicine is not a soulless scramble for wealth and power, but a vocation for earnest men who must constantly and unflaggingly seek the highest possible efficiency in order to do the greatest possible good.

The ideal hospital system, and one that sooner or later must be adopted, is that which offers to every medical man the opportunity of placing his patients in any hospital he or they may elect, there to treat them with all the freedom that is his as a legally qualified practitioner of medicine. No fear need be entertained as to the effect on any hospital's statistics. Talents and skill will win out, just as they do in private practice, but giving equal hospital privileges to every physician and surgeon cannot fail to work for the general elevation of all. The benefits that will accrue to the afflicted are immeasurable, for instead of being the last resort, a sojourn in a well equipped hospital will be the general custom, especially in the management of infectious or contagious diseases. Hospitals will then become in reality what they were originally intended to be, institutions solely for the use and welfare of the public, and not institutions for the promotion of private gain, professional or otherwise, as under present conditions is too often the case.

#### OVERPRODUCTION OF PHYSICIANS.

Dr. H. S. Delamere, in the *California State Journal of Medicine*, points out that much of the unprofessional, degrading, and even criminal conduct that is to be found among some practitioners of medicine is due to the overproduction of physicians. The doctor may have started with the highest ideals and the noblest conception of the physician's duty, but the lack of the necessities of life leads him first to outrage his feelings with commercialism, from which the road downward is easy. Delamere's remedy is to stop overproduction. It is the number of medical colleges that causes the trouble, and we need legislation to correct the medical college evil, instead of that which prevents the graduate from following the profession in which he thinks he is educated. Every medical student should study at least one year in a physician's office before he is permitted to enter a medical college. This would result in a considerable weeding out of unfit candidates. Delamere suggests that the physicians of each state should select by vote, taken in the county societies, one medical college to which they will recommend their students,



and colleges which can not be legislated out of existence will have to close for lack of victims. At present all our legislation deals with the poor victim after the medical college has got his last cent. Instead, we should have laws dealing with the colleges. He further recommends that the American Medical Association should send circulars to all the high schools, giving the graduates correct information as to the exact conditions of the professions of medicine and dentistry.

## REPORTS FROM COUNTY SOCIETIES.

### ATLANTIC COUNTY.

Theodore Senseman, M. D., Reporter.

A meeting of the Atlantic County Medical Society, held at the Carnegie Public Library, November 6, 1908, ended a contention which has been going on for the past six years by the election of Dr. Herman D. Marcus to membership by a two-thirds majority vote.

Other applications also acted upon favorably were those of Drs. Clevenger, Miller, Mason, Jenifer and Lawrence.

Dr. J. A. Joy was chosen unanimously as chairman of the entertainment committee for the forthcoming annual meeting of the American Medical Association in June, 1909.

Interesting papers were read by Drs. Krusen, Hammond, Senseman and Darnall. It was one of the largest and most enthusiastic meetings held in years, and signals complete harmony in the profession.

Dr. James Hunter, of Gloucester County, the councilor for the fifth district, made a speech, as did also Dr. Halsey, one of the trustees of the New Jersey Medical Society, who were down for the occasion.

### CUMBERLAND COUNTY.

John H. Moore, M. D., Reporter.

The regular quarterly meeting of the Cumberland County Medical Society was held in the parlors of the City Hotel, Bridgeton, on Tuesday, October 13th, Dr. J. C. Loper, of Bridgeton, in the chair.

In addition to the usual routine business an interesting discussion took place regarding the advisability of the State Society assuming the legal defence of its members in cases of suit for malpractice. Considerable difference of opinion was found to exist. Some of the members expressed themselves to the effect that the individual practitioner in such a case should protect himself by joining some of the organizations which have been formed in the interest of physicians who have become the victims of damage suits, and that it would be a mistake for the State Society to assume the responsibility of conducting the legal defence of every member who might be unfortunate enough to be the subject of a charge of malpractice; a majority of the members, however, seemed to be favorable to such action.

The regular paper of the day was presented by Dr. R. Max Goepf, of the Philadelphia Polyclinic, who took for his subject "Tuberculosis in its Relation to Life Insurance." He dealt particularly with the problem of early diagnosis, point-

ing out the difficulties and how they might be met. The paper was very generally discussed and was very practical and interesting.

Dr. W. Leslie Cornwall was proposed for membership and referred to the Censors to be reported upon at the next meeting, which will be held at Millville, January 12, 1909.

No epidemics have been reported since the last meeting of the Society, and the health condition of the county has been uniformly good.

### SALEM COUNTY.

John F. Smith, M. D., Reporter.

The regular November meeting of the Salem County Medical Society was held at the Schaefer House, Salem, on Wednesday, November 4th, 1908, Dr. L. H. Hummel presiding.

Dr. E. P. McGeorge, of Woodstown, read a paper on "Six Weeks of Appendicitis, with a Report of Cases," after which a general discussion took place which was very interesting and instructive. A vote of thanks was extended to Dr. McGeorge for his excellent paper. Dr. W. P. Glendon, of Cedarville, and Dr. J. L. Nicholson, of Camden, also reported some interesting cases.

Dr. E. E. De Grofft, of Woodstown, gave a report of the meeting of the State Society, at which he was a delegate from our Society.

No epidemics were reported as having occurred within the bounds of the county. The question of fees and rates was discussed and a new standard was adopted.

Dinner was served at 4 P. M., and the Society adjourned to meet at French's Hotel, Woodstown, on February 3, 1909.

## TRI-COUNTY MEDICAL SOCIETY OF SOUTH JERSEY.

CUMBERLAND, GLOUCESTER, SALEM.

George E. Reading, M. D., Secretary.

The Tri-County Medical Society of South Jersey, embracing the counties of Cumberland, Gloucester and Salem, met at the City Hotel, Bridgeton, Oct. 27, 1908, the president, Dr. John H. Moore, of Bridgeton, in the chair. The report of Dr. Reading, secretary and treasurer, showed the society to be in a flourishing condition, and the meeting was, in point of attendance, the largest, and also the most interesting meeting ever held by the society.

The president read his annual address, entitled "The Relation of the Medical Profession to the Public." Dr. J. W. Kennedy, of Philadelphia, read a paper on "A Plea for the Early Diagnosis and Prompt Operative Interference in Peritonitis."

Dr. Joseph Tomlinson, of Bridgeton, read a paper on "The Diagnosis and Treatment of Sarcomata." Dr. M. W. Newcombe discussed the X-Ray treatment of such neoplasms, and the general discussion was participated in by Drs. Glendon and Kennedy.

The following officers were elected for the ensuing year: President, Dr. H. B. Diverty, of Woodbury; first vice-president, Dr. Richard M. Davis, of Salem; second vice-president, Dr. W. P. Glendon, of Cedarville; secretary and treasurer, Dr. George Evans Reading, of Woodbury; executive committee, Drs. S. F. Ashcroft, of Mullica Hill; J. H. Moore, of Bridgeton, and B. A. Waddington, of Salem.

# THE JOURNAL

OF THE

## Medical Society of New Jersey.

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 DECEMBER, 1908
 

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 95 Essex Avenue, Orange, N. J.*

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### STATE SANITARY ASSOCIATION.

We call special attention to the thirty-third annual meeting of the New Jersey Sanitary Association at the Laurel-in-the-Pines Hotel, Lakewood, N. J., December 4th and 5th, 1908. The sessions will begin at 3.30 P. M. on Friday, December 4th.

From the subjects and discussion, as per program outlined in our November issue, it promises to be one of the best of the series of annual meetings the Association has held and we hope for a large attendance from the membership of our State Society. As we have before stated, our Society took the initiative in the efforts to have the health interests of our State carefully guarded, resulting after strenuous, persistent efforts, extending over a period of many years, to secure, by legislative enactment, a State board of health, and then, as faithfully and earnestly sought to secure through the board established the greatest efficiency.

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We make the additional statement of facts which the records of our Society, the results of past work and the natural sequence of events abundantly warrants—that the actions of our State Society in all matters affecting the public health and the care of the classes dependent on State charity, have been singularly free from just charge of attempt or desire for

the pecuniary benefit of the profession. On the contrary it was known that the advocacy and accomplishment of the beneficent ends sought meant decided loss to the members of the profession.

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At the present time it is of the highest importance that the members of our profession shall seek to watch and care for this sacred work of safeguarding the lives and health of our citizens, and especially against what has seemed to be a **tendency** toward political manipulation in the interest of partisan politics. That medical men are the proper leaders in this work—the logical custodians of these sacred interests, needs no argument; but it is well known that they are, as a class, much more independent in thought and non-partisan in action than others, when questions involving the welfare of the State and the good of her citizens, especially as regards public health, demand that partisan politics shall not overrule considerations and actions for the public good.

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### PREVENTION OF MENTAL DISEASE.

When we consider the ever increasing number of cases of mental disease and the overcrowding of our State and County hospitals for the insane, the large and increasing number of sanatoria for the care of patients of unsound mind or weakened mental capacity, and the large number of murders and suicides, due to an unbalanced mind, committed by persons outside our institutions, the question of the adoption of every means possible to arrest this constant increase appeals to every member of our profession as one of the most important problems that can engage his attention. It should lead us to seek out and put in practice every prophylactic measure that gives the least promise of success for the prevention of any of the various forms of mental alienation. We were pleased to receive a valuable paper, entitled "Prevention of Men-



tal Disease," read by Dr. F. C. Horsford, of the Morris Plains Hospital, before the Morristown Medical Club, recently, and we give it insertion in this issue of the JOURNAL, commending it as worthy of the careful consideration of our readers.

### INSOMNIA.

There is probably no case in which empiricism is more frequently practiced, even by medical men sometimes, than in the treatment of insomnia. There is perhaps no class of nostrums, advertised widely in the daily press and magazines and used by the public *to their detriment*, than those for the relief of sleeplessness and pain. Probably there is no line of proprietary preparations that are classed as ethical—having been approved by the Council on Pharmacy and Chemistry—more unscientifically used, even by physicians of good standing, than preparations that are extolled for the cure of insomnia. Thus we have Mrs. Winslow's soothing syrup (one of the oldest and most objectionable), antikamnia, ammonol, bromidia, neurosine, Peacock's bromides, and a host of other synthetic compounds for the relief of sleeplessness and pain used indiscriminately, because the prescriber is too busy, too lazy or too ignorant to examine into the causation of these conditions and used the remedy nearest at hand, thus treating the symptoms instead of the disease or the abnormal condition that produces them.

We commend to all our readers, and especially those to whom the above remarks apply, the excellent article on Insomnia, under the heading Therapeutics, in the A. M. A. Journal, October 3, 1908, pages 1155-1157. The writer considers first the normal physiology of sleep, and Dr. Alex. Morison's division of sleeplessness into the three groups—the cellular, neural and hemic. Then gives another classification, believed to be better for deciding the treatment of insomnia: (1) Insomnia due to pain; (2) due to mental excitement; (3)

due to worry; (4) due to disturbances of the circulation; (5) due to toxins in the blood. Then follows, at considerable length, the treatment according to causation, the writer wisely observing that it is absurd to treat insomnia, but that it is rational to treat the cause of sleeplessness.

With this issue we close the work of the year 1908. We believe it has been a year of marked advance in our profession and in the work of our Society.

We modestly claim it has been a year also of improvement in our JOURNAL, though it has been the most difficult one we have experienced, owing to the many changes in the printing offices from which it has been issued. Hoping for better conditions we shall try to give our readers a still better JOURNAL the coming year, and in the meanwhile extend to them our best wishes for the holiday season.

### STATE TUBERCULOSIS SANATORIUM.

#### RULES FOR ADMISSION.

All applicants desiring admission to the New Jersey Sanatorium for Tuberculous Diseases will, in the future, be examined by physicians sent out from the institution. The following stations have been established, viz: Camden, Trenton, Newark, Jersey City, or such other places as the Superintendent may designate.

Notify Superintendent, Dr. S. B. English, Glen Gardner, N. J., giving applicant's full name and address. The Superintendent will then communicate directly with applicant and arrange for time and place of examination. If no vacancies exist the applicant's name will be listed and he or she will be notified in proper turn as vacancies occur.

Patients must not be sent to the institution at Glen Gardner, except upon the advice of the Superintendent, which advice will be withheld until after the proper examination has been made.

Attention is again called to the fact that, according to the State law, *this Sanatorium is for incipient cases only*, and advanced cases will not, therefore, be accepted.

### PRIZE ESSAYS.

These prizes were instituted by the Medical Society of New Jersey at the annual meeting in 1905, and are open for competition to the members of the Component County Medical Societies.

The subject chosen this year is:

"THE SYMPTOMS, ETIOLOGY, PATHOLOGY AND TREATMENT OF EXOPHTHALMIC COITRE."

Each essay must be signed by an assumed name and have a motto, both of which shall be enclosed in a sealed envelope, containing the author's name, residence and component society.

The essay shall contain not more than 4,000 words and must be characterized by originality in investigation and thought, and by clearness and conciseness of expression, and be, in the judgment of the Committee, of decided value to the members of the Society and to the profession generally. Failing in these respects no reward will be made.

The essays, which must be type-written, with the sealed envelope, must be placed in the hands of the committee on or before the first day of May, 1909.

The Committee will select the first two essays in order of merit. To the first will be awarded the prize of one hundred dollars, to the second fifty dollars.

The unsuccessful authors will receive back their essays upon their identification to the chairman of the Committee. The successful essays will be the property of the Society and will be published in the Journal.

CHARLES T. KIPP, Newark, Chairman.

DAVID C. ENGLISH, New Brunswick.

STEPHEN PIERSON, Morristown.

Committee.

### THE ISOLATION HOSPITAL.

(Editorial Newark Evening News, October 16th.)

The County Isolation Hospital at Soho continues to be more of an ornament than a useful institution. It is true that one patient is being treated there for diphtheria, and that another one held there for a day on suspicion of being afflicted with a contagious disease has now been discharged, but it hardly seems possible that the work of caring for these two cases has over-worked the forty-two employes of the institution, five of whom are nurses. Yet nothing is being done by the Board of Freeholders to bring about conditions to convince the taxpayers of Essex County that the money they are paying for the maintenance of the hospital is not being wasted. The freeholders do not seem to care whether or no the institution is meeting the objects for which it was erected. The majority members of the board have had orders from their political boss to make a show of economy, and the way

they are following these instructions is to keep the patients down to the lowest limit by refusing to provide for cases demanding attention.

But the people will not be deceived by such sort of tactics. When they know that there is a commodious institution ready for business, thoroughly equipped with all the help necessary, while hundreds of sufferers from tuberculosis are denied the privilege of going to the hospital for treatment, although the board of managers is willing and even anxious to receive these unfortunates, they will draw their own conclusions. As the News said just recently, there were over 800 deaths from consumption in Newark last year, and the ravages of the plague are even more in evidence this year. The victims of this dread disease are entitled to seek relief and isolation at Soho, and it would be to the benefit of the whole county if they were permitted to do so. But the Democratic political boss of the county has decreed otherwise in order that he may continue to assert that the county government is being conducted economically.

"Man's inhumanity to man makes countless thousands mourn," and in this instance it ought to make even the political bosses sad. It will do so, too, if the people are aroused as they should be over the prevailing conditions at the County Isolation Hospital.

(A promised reply to the above has not been received.—Editor.)

### THERAPEUTICAL NOTES.

#### Boils and Carbuncles.—

A 25 per cent. solution of menthol in ether, applied several times a day to commencing boils and carbuncles will frequently absorb them.

*Critic and Guide.*

#### Coryza, Acute.—

Mix camphor 1 dram, menthol 30 grains, and chloroform 3 drams. Inhale a few drops from the palm of the hand or from a piece of cotton. Gives great relief in acute coryza.

*Critic and Guide.*

#### Dyspepsia, Flatulent.—

Three drops of oil of cajuput on a piece of sugar or on a crumb of bread, taken frequently, is worth all the other anti-fermentatives put together. It is not only antiseptic but agreeable.

*Critic and Guide.*

#### Endometritis.—

In fungous endometritis and in the metrorrhagia of uterine fibroids potassium iodide is well worthy of trial. It may also be tried in cases of threatened abortion.

*Critic and Guide.*

#### Inflamed Joints.—

Patients afflicted with swollen, painful joints often insist upon local applications. Whether the arthritis be traumatic or rheumatic this combination will give satisfaction:

Salicylic acid .....	3iij
Tinct. Opium.....	3iss
Oil turpentine.....	3j
Oil cloves.....	3iij
Alcohol .....	3xij

Rub on the affected parts every two or three hours. Chloroform may be substituted for the oil of cloves if desired.—*American Journal Clinical Medicine.*



**Ichthyol—Various Uses of.—**

No one has yet given any rationale of the action of Ichthyol, yet Hare declares it "the best external treatment of erysipelas that we have." In employing it in erysipelas, the skin is well washed and then anointed with the following:

Ichthyol, .....	½ oz.
Oil citronella .....	20 drops
Lard of petrolatum.....	1 oz.

and is then covered with lint upon which the same ointment has been spread.

It is also valuable as an inunction in acute rheumatism, and the same prescription is serviceable. In chronic skin diseases characterized by atony and induration of the deeper layers of the skin, it is of marked benefit. Properly rubbed in, in cases of acute sprains, its effect is almost magical. In fissured nipples, accompanied by induration, an ointment containing 1 part of Ichthyol to 4 of Lanolin will give prompt relief; it must be carefully wiped off the nipple before each nursing, as the "tarry" odor will frequently cause the child to refuse the breast. Agnew esteemed it highly in cases of lymphatic enlargement.—*Albright's Office Practitioner.*

**Labor—Irrregular and Painful.—**

Dr. C. N. Miles recommends the following prescription as especially applicable in primiparæ during the first stage of labor, when the patient is nervous and irritable, and the os rigid and undilatable:

Ammonium Bromide,	
Chloral Hydrate,	
Sodium Bromide,	
Potassium Bromide.....	Of each 10 grains
Tinct. Orange.....	10 min.
Strychnine Sulphate.....	1-30 grain
Tincture Calumba.....	10 min.
Chloroform water.....	to make 1 oz.

For one dose.—While the mental anxiety and the pains are relieved to a great extent by this combination, the progress of labor is not interfered with in the least. *Critic and Guide.*

**Nocturnal Incontinence.—**

Cases of this condition in children and adolescents are sometimes improved by ordering the patient to bed for an hour or so in the middle of the day.

**Sulphur—The Therapeutic Use of.—**

The observation to the effect that the sulphur preparations are often of very unequal efficiency is referable to the more or less finely distributed form of the sulphur in the preparation employed. In the author's experience a constant and uniform effect was obtained by means of a 30 per cent. sulphur ointment, prepared by rubbing up a quantity of still moist, newly precipitated sulphur, with an ointment vehicle (pasta sulphuris pultiformis). The employment of this sulphur paste was followed by favorable results in cases of scabies, acne vulgaris, seborrhea of the scalp, pityriasis versicolor, herpes tonsurans, and all forms of seborrhoeic eczema. Certain cases of chronic eczema as well as fresh efflorescences of psoriasis were likewise favorably influenced. The preparation was painted on the parts two or three times daily, or it was rubbed in the affected skin segments.—*Med. Rev. of Rev. (Dtsch. Med. Wchschrft.)*

**Ulcer of Leg.—**

When a patient suffering from varicose ulcer of the leg will not consent to curetting and the Schede operation, the following ointment may be ordered, with fair chance of benefit: Ungt. ferri oxid, hydrate, ungt. styracis, olei olivae, aa., partes aequales. This ointment is to be applied on gauze, once daily; better on silk.—*American Journal of Clinical Medicine.*

**X-ray Burns.—**

Mewborn uses the following application in radio-dermatitis:

℞ Plumbi acet .....	gr. L
Aquae .....	3iiss
Solve et adde	
Aluminis sulph. ....	3i
Sodii sulph. ....	gr. x
Aquae .....	3iv

M. et sig. Shake and apply locally to the affected area.

*St. Louis Med. Review.*

**Action of Drugs at Night.**—Everything else being equal, remedies are more effective in the night than by day. This is owing to the fact that at night the processes of absorption are quickened and those of elimination abated. For the same reasons toxicity of drugs is greater at night.—*Medical Council.*

**CURRENT MEDICAL LITERATURE.**

**Diet of Nursing Women.**—L. Bouchacourt (*Jour. de Med. de Paris*, June 20, 1908) states that the diet of the nursing woman should be most abundant, but its quality is also important. Vegetables should be the most important part of it, meat being of less value in producing milk. Of the vegetables that produce the milk, lentils, cotton-seed oil cakes, carrots, beets, chicory, parsley, peas and beans are the most valuable. Cod liver oil is also valuable. The author believes that milk and light beers and ales are galactogogues. He would arrange the diet thus: bread 400 grams, meats or fish 250 grams, dry vegetables 500 grams, fresh vegetables 300 grams, vermicelli and macaroni 100 grams, sweet fruits and candies 100 grams, butter, milk and cheese 1500 grams, beer or cider 1000 grams, water 1000 grams.

**Removal of Placenta.**—M. Hofmeier, *Berlin Med. Woch.* (March 25, 1907), says that the proper management of the third stage of labor is by careful watching and absolute non-interference, while the fundus is held by the hand. The advent of contractions should be waited for as long as there is little loss of blood and the fundus remains hard. The question that comes up is how long should one remain inactive, and when should he begin to make expression movements. As soon as the bleeding is greater than the patient's condition will warrant, interference should begin. In cases of fat and flaccid women who cannot give aid by abdominal pressure narcosis is an assistance. The use of the hands internally should be delayed as long as possible. If possible, removal should be by expression alone. When the hands must be used, they should be prepared by most careful sterilization, or sterilized rubber gloves should be used. As careful asepsis should be secured as in any surgical procedure. The author, out of sixty-seven removals of retained

placenta, has had only six deaths, and all of these were from causes that could not be referred to lack of asepsis. In some cases the placenta is so firmly adherent that expression is unsuccessful; it has grown to the uterus through atrophy of the decidua, or growth of the chorionic tufts into the substance of the uterus. In these cases it is impossible to get a smooth uterus after removal, and often the placenta must be removed piecemeal. Here it is almost impossible to tell when the placenta has been all removed, and small scraps must often be left behind. After the removal there should be careful intra-uterine irrigation with antiseptics. When only the membranes are left behind, if the patient can be kept under careful observation, it is possible to wait until nature removes them with the lochia. There may be slight fever and offensive lochia accompanying this removal. Ergot may be given to detach the membranes, and antiseptic douches used.—*Amer. Journal of Obstetrics*.

**Physiologic Antagonism Between Aconite and Belladonna.**—Dr. H. Speirs reports the case of a patient who took by mistake half an ounce of a liniment, composed of chloroform, aconite and belladonna. The patient took 53.3 grains of aconite root, which represents one-fourth grain of aconitine, of which one-sixteenth grain has been known to be fatal. He also swallowed 40 minims of fluid extract of belladonna (B. P.), which is equal to 0.3 grain of the total alkaloids. This would represent approximately thirty times the official dose of atropin. Of chloroform he took 40 minims, about eight times the official dose. The interest in the case lies in the fact that the lethal effect of a large dose of aconite was abolished by the simultaneous action of a large dose of belladonna. Muscular weakness, numbness of the extremities and tendency to complete collapse were the only purely aconite symptoms observed. Salivation, which is usually present in aconite poisoning, was absent, and the usually contracted pupil was overcome by the action of the atropin. Finally, the intensely depressant action of aconite on the central nervous system was counteracted by the stimulating influence of the belladonna. Spiers declares that the obvious lesson to be drawn from the case is the great value which should be attached to hypodermic injections of atropin in aconite poisoning.—*British Medical Journal*, August 15.

**Treatment of Hysteria.**—Meyer says that in local hysterical conditions the treatment of the underlying general disease is of greatest importance. The disturbance being of a psychic nature psychotherapy offers most chance of success. At the same time such conditions as anemia (chlorosis, infectious diseases, etc., coexisting with hysteria must be treated in the usual fashion, for they may cause the continuation of the functional disease. The psychic condition in hysteria is very similar to that of the child, for effects are more dominant than the voice of reason, and the treatment of hysteria is properly called the education of the patient. His confidence must first be obtained by careful attention to the usual long story of his ills and the avoidance of all scoffing at his complaints. A complete physical examination should always be performed. Then the treatment followed by the patient in the past should be inquired into so that some ineffective method may not be repeated and the patient thus shaken in his confidence in the doctor. The patient must be impressed with the

fact that the affection which to him seems to be of extremely urgent and dangerous nature is only functional in character and that organically his body is quite sound. At the same time care must be taken not to lead the patient to suspect that his complaints are not seriously considered; the word hysteria is best not mentioned before the patient, while relatives may be acquainted with the nature of the disease, only if they may be supposed to understand it properly. Medicinal and hygienic treatment must be combined with psychotherapy, both because there are usually indications for such measures and because the psychical treatment alone may not sufficiently impress the patient. Treatment is best carried out in a sanatorium or at least away from the usual family circle of the patient, where the physician cannot very easily obtain much influence over the mind of the patient. While the use of hypnotism may be justified in experienced hands, this method must be avoided in routine cases and in general practice, for it is quite true that a healthy man may be brought to the verge of hysteria by improper use of hypnotism as often as a hysterical person may be improved by the measure.—*Deutsche medizinische Wochenschrift*, September 17, 1908.

### When to Operate for Peritonitis.

In *International Journal of Surgery*, May, 1908, in an article, entitled, "When to Operate in Peritonitis," in reply to a letter by the author, Dr. Charles Graefe, Dr. J. B. Murphy, of Chicago, replies as follows:

"In reply to your communication of October 9, I would say, in answer to the question, 'When shall we operate?' for appendicitis, the answer should be: Immediately after making the diagnosis; and the diagnosis should be and can best be made within the first six or eight hours after the onset. There is no time, however, in the course of the disease when one is justified in waiting, whether it be the first, third, fifth, seventh, ninth or eleventh day, with emphasis on the odd day for luck. From the symptoms we are unable to tell of many of the pathologic conditions and their progress in the abdomen from day to day. From the symptoms and signs we are always able to make the diagnosis in the first twenty-four hours.

"Now, with reference to the peritonitis, my article on suppurative peritonitis includes the perforative variety; that is: (a) Perforations of the stomach; (b) Perforations of the duodenum; (c) Perforations of the intestines—principally typhoid—and (d) Direct perforations of the appendix into the free peritoneal cavity. It does not include the cases of circumscribed abscess with large quantities of purulent fluid in the peritoneum. These are not perforative cases, and practically all get well on the old treatment.

"I have had up to date forty-three consecutive cases of perforative peritonitis in four and one-half years, and in all there was a direct communication from the peritoneum into the opening in the intestine, and in none were there circumscribed or encapsulating adhesions. Of these, forty-two of the patients are living. The technique consists in: 1. Opening the peritoneal cavity; 2. Locating the point of leakage; 3. Closing the point of leakage; 4. Inserting a large drain into the pelvis, and if the infection be in the upper abdomen, also one directly from the wound to the point of primary infection; 5. Plac-



ing the patient in extreme Fowler position; 6. Instituting continuous proctoclysis, so that not less than eighteen pints of salt solution are administered and absorbed in twenty-four hours.

Each year hundreds of young men receive their diplomas and are supposed to be ready to attend to the ailments that afflict poor suffering humanity. The *Medico Chirurgical Journal* says that each of these young men should ask himself what he is going to do with his life. "There are many doctors, who have achieved a high reputation in their profession, who have still made a failure of their lives. Their aims have been low. They have not had a high ideal of their profession, and as a consequence they have missed the better part of life. Mere skill in diagnosis or with the knife does not mean success in the highest sense. It is in the moral sphere that the doctor, like every other man, gains his greatest success. It is the duty of every man to make the best of what is in him. Unless he works, from a sense of duty, in this direction his successes will be merely of a temporal nature. He may make a discovery or two in the practice of medicine which may be of use to mankind, but he will have left no lasting impression on the world. In fact, the world would have been as well off if he had never lived, for some other man would soon have made the same little technical discovery."

### Hearing in Dumb Children.

That there is a considerable number of dumb persons who have normal hearing, and that the education of these is often neglected because they are difficult to deal with, is asserted by *The Lancet* (London, January 27), which says: "A child may hear music and hum the tune or repeat it, he may go upstairs and find something when told to, and yet remain speechless. These cases vary; usually examination shows no defect in the size and form of the head or development of the features, but there is a lack of the normal brain spontaneity that can be coordinated in imitation of movements made by a teacher, and such action as occurs is inexact, with a corresponding want of imitation of the movements produced in the face during articulation. The result is that speech remains absent from want of training of the necessary movements of the lips and tongue; the child will sometimes sing, though he will not articulate. All that the children need is training in imitative faculty with daily practice in oral teaching, such as is almost universally used with deaf children. In public elementary schools there is often great difficulty in providing proper teaching for these speechless children who have hearing."

Intermittent mucoid or mucopurulent discharge from the ear without pain or fever suggest nasopharyngeal disease; in children, adenoids.—*Amer. Jour. of Surgery*.

"Paracentesis" is a misnomer. The drum should be slit from below upwards and near the posterior margin, throughout its entire extent. In withdrawing the knife it may be allowed to cut deeply into the upper canal wall near the drum (internal Wilde's incision).—*Amer. Jour. of Surgery*.

### SURGICAL SUGGESTIONS.

#### From the American Journal of Surgery.

Polypi in the ear (as in the nose) indicate diseased bone conditions. Removal of the polyp does not prevent recurrence; removal of the diseased bone does.

A feeling of discomfort in the mouth while eating may be the first signs of a calculus in one of the salivary ducts.

When paraffin is injected subcutaneously allowance should be made for increase in the size of the mass by the growth of connective tissue around it.

Diverticulum of the bladder, associated with cystitis, may produce symptoms resembling those of prostatic hypertrophy.

A mediastinal tumor may be present for some time without other symptoms than cough, expectoration, loss of flesh and slight fever—thus simulating pulmonary tuberculosis. A skiagraph will determine the condition; laryngoscopy is also helpful for adductor paralysis is frequently an early sign.

Probably the most important step in radical inguinal hernioplasty is the total removal of the sac. It should be traced back to the loose peritoneum itself, exposing the deep epigastric vessels, the ligature or sutures to be applied at that level. To leave even a little projecting knuckle of peritoneum invites recurrence.

Preauricular pain and tenderness points to an enlarged lymphatic gland, a decayed tooth, an affection of the parotid or a neuralgia of the fifth nerve; auricular tenderness itself indicates some affection of the auricle or the external canal; post-auricular tenderness may be hysterical or indicate mastoid disease.

In many instances where a patient is supposed to have merely a sprain of the ankle, there is some fracture around or into the joint. Signs of fracture should be carefully sought for. Where nothing can be found around the ankle on examination and the patient still continues to complain of pain and weakness, a skiagraph may show a transverse fracture of the os calcis which is held in place by the flexor muscles.

### HIGHLY IMPORTANT.

A communication from Dr. L. M. Halsey, chairman of the Committee on Legislation, was received just as the JOURNAL went to press, calling attention to the fact that the osteopaths are seeking to secure legislation even more objectionable than heretofore. Let every member present the matter in its true light to the legislators from his county. We will give Dr. Halsey's letter in our next issue.—EDITOR.

Avoid touching the cornea during the administration of an anesthetic. The ocular reflex can be obtained just as well through the lids, and the pupils and motions of the globe offer the most definite indications of the degree of narcosis.—*Amer. Jour. of Surgery*.

## OBITUARIES.

PARSELL.—As previously announced in THE JOURNAL, Dr. Louis B. Parsell, of Closter, Bergen County, died at his home, April 22d, 1908.

The following action on his death was taken by the Bergen County Medical Society:

Doctor Louis Bevier Parsell was born in Owasco, N. Y., April 16th, 1851. He was educated in the Public School near his home and was graduated from the High School of the city of Auburn, N. Y. For three years he held the position of professor of mathematics in the Seminary of Fort Plain, N. Y., and then entered the Medical School of the City of Buffalo. From there he went to the Long Island Medical College, where he received his degree in 1883. He began his professional career the same year in Harlemville, N. Y. In 1884 he came to Closter, Bergen County, New Jersey, where his gentle, manly bearing soon won the favor of the community. His professional reputation was early established and the village and its surroundings became the field of his life work.

Studiously inclined, he kept abreast with the advancement of the Medical profession, and his work, modestly, patiently, conscientiously prosecuted, won at least average recognition and reward. He was for a long period a faithful and honored member of the Bergen County Medical Society and an active member of the Medical Board of the Englewood Hospital.

For months prior to his death he persevered in his daily round of professional work, carrying a burden of physical infirmity that culminated in his decease April 22nd, 1908, unexpected to his friends, though anticipated by himself. His funeral took place in the Congregational Church of his home village, and the deep feeling characterizing the occasion gave evidence of the high estimate of his worth as a citizen, physician and friend.

The members of the Bergen County Medical Society, mindful of the foregoing facts, have unanimously

*Resolved*, That in the character, life and professional work of their co-worker, Doctor Louis B. Parsell, they find much to admire, commend and imitate.

That by his death they have been deprived of an esteemed and worthy associate, and they believe that those within the field of his professional labor have special cause for regretting his decease and cherishing his memory; That knowing the sense of loss to the immediate circle of relatives must be profound, they tender their sympathy and order that a copy of this be sent to the family of the deceased, and that a minute of the same shall be made and placed upon the minutes of the Bergen County Medical Society.

PETTIT.—Dr. Alonzo Pettit, of Elizabeth, N. J., died, after a short illness, on November 14, aged 66 years. Dr. Pettit was graduated from the Buffalo Medical College in 1867, and had since practised in Elizabeth. He was one of the organizers of the Elizabeth General Hospital and a member of the visiting staff. He belonged to the American Medical Association and the New Jersey State Medical Society, and the Union County Medical Society.

At a special meeting of the Clinical Society of the Elizabeth General Hospital and Dispensary, held November 16, the following tribute to the memory of Dr. Pettit was unanimously adopted,

ordered published in the daily press, and a copy sent to his bereaved family:

Again death has called upon this society to give up one of its members—Dr. Alonzo Pettit. By his death the society loses its most valuable and faithful member. Connected with the society since its incipency, he was one, if not the most, faithful member of this organization, and rarely he missed its meetings; bodily ills, inclemency of weather, were unable to keep him away from it, and one of the last expressions, shortly before his unexpected death, was the hope that he would not be obliged to miss the next meeting.

In the past one of the most active members of the society, when enfeebled by ill health he never lost his interest in the same. Every progress in medicine and surgery was of interest to him, and when ill health prevented him from actively engaging in the work, he enjoyed the work and success of those who grew up after him. He truly was a man without the slightest selfishness—the very personification of altruism. His sweetness of character, his fortitude in bodily suffering, his patient bearing under the severe dispensation of Providence, which almost deprived him of the companionship of his faithful wife—his purity of mind, his upright life, placed him upon a level rarely attained and never surpassed by men. The memory of his virtues, the recollection of an association with such a man, the example which he has been to the younger members of the fraternity, the friendship which he cherished for the older colleagues will keep him dear in our memory.

T. N. McLEAN, M. D.,

VICTOR MRAVLAK, M. D.,

J. S. GREEN, M. D.,

*Committee.*

SMITH.—Dr. Daniel Winans Smith, for over fifty years a practitioner of Newark, N. J., died at his home in that city on November 10, after an illness of several months. Dr. Smith was born in 1833, and was graduated from the medical department of the University of New York in 1856. He was a member of the American Medical Association, the Essex County Medical Association, and the New Jersey State Medical Society.

## BOARD OF HEALTH OF THE STATE OF NEW JERSEY.

### Monthly Statement of Mortality.

October, 1908.

During the month ending October 15, 1908, 2,904 deaths were reported to the Bureau of Vital Statistics. By ages there were 786 deaths among infants under one year, 261 deaths of children over one year and under five years, and 782 deaths of persons aged 60 years and over. The usual annual increase in the deaths from typhoid fever has not yet appeared in the records and the number of deaths from typhoid for the present month (34) varies but little from the average (37) for the previous twelve months.



The number of deaths from cancer continues to increase and the following table shows deaths from this cause for the past ten months together with the yearly average.

Deaths from Cancer—January, 150; February 126; March, 130; April, 128; May, 112; June, 121; July, 130; August, 132; September 134; October, 144; yearly average, 126.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending October 15, 1908, compared with the average for the previous twelve months; the latter are given in brackets:

Typhoid fever, 34 (37); measles, 1 (13); scarlet fever, 18 (34); whooping cough, 21 (20); diphtheria, 34 (46); malarial fever, 3 (3); tuberculosis of lungs, 248 (297); tuberculosis of other organs, 50 (51); cancer, 144 (126); cerebro spinal meningitis, 24 (28); diseases of nervous system, 351 (363); diseases of circulatory system, 307 (318); diseases of respiratory system (pneumonia and tuberculosis excepted), 129 (179); pneumonia, 125 (249); infantile diarrhoea, 367 (222); diseases of digestive system (infantile diarrhoea excepted), 225 (198); Bright's disease, 194 (205); suicide, 35 (37); all other diseases or causes of death, 594 (605).

### Division of Food and Drugs.

During the month ending October 31, 1908, 564 samples of food and drugs were examined in the State Laboratory of Hygiene, of which we note the following:

Below the standard, 18 of the 116 specimens of milk, 22 of the 62 of butter, all 11 of tamato catsup, 3 of 67 of honey; up to or above standard, all 16 of allspice, all 18 ground cloves, all 35 of chocolate and cocoa, all 9 of coffee and 6 of corn starch, all of 22 of ground ginger, 20 of the 22 of mustard, 61 of the 66 of pepper, all 4 of syrup, 31 of cider vinegar, 3 of cream tartar.

Eleven suits have been instituted for adul-

terated milk, 20 for adulterated butter, and one each for mustard, ground cinnamon, black pepper and white pepper.

During the month ending October 31, 1908, 118 specimens were made in 67 cities and towns.

The following articles were inspected during the month but no samples were taken:

Milk, 187; butter, 381; foods, 605; drugs, 70; other inspections were made as follows: Milk wagons, 94; milk depots, 40; grocery stores, 517; drug stores, 37; milk cans, 1,254; milk bottles, 168.

### Bacteriological Department.

Specimens for bacteriological diagnosis: From suspected cases of diphtheria, 346; tuberculosis, 331; typhoid fever, 236; malaria, 10; miscellaneous, 20.

### Division of Sewerage and Water Supplies.

Total number of samples analyzed in the Laboratory, 169. Public water supplies, 59. Private wells, 31. Dairy wells, 13. Creamery supplies, 38. State institution supplies, 2. Sewage samples, 26.

Inspections—Public water supplies inspected at Hightstown, Gloucester, East Orange, Jamesburg. Private supplies inspected at Allentown. State institution supply inspected at Glen Gardner.

Sewage disposal plants inspected at Vineland, Flemington, Burlington, Haddonfield, Freehold, Moorestown, Diver Brook, Westfield, Princeton, Lakehurst, Red Bank, Trenton. Sewerage systems inspected at Spring Lake, Riverton, State Hospital, Trenton. Cases of special pollution investigated, 6.

Stream inspections continuing on Delaware, Raritan, Rahway, Rockaway and Shrewsbury Rivers, Deal and Wesley Lakes.

Number of persons summoned before the Board, 162.

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The JOURNAL will be glad to print original papers from any source, preferably from members of the State Society, provided that they shall be of sufficient merit and shall be contributed to this paper exclusively.

Anonymous communications will not be published, but the name of the author of a communication will be kept secret if the editor is requested to do so.

The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer. We cannot promise to return unused manuscript.

Authors may obtain reprints of their papers at cost, provided a request for them be written on the manuscript. Matter received after the 20th of any month cannot appear in the next issue of the JOURNAL.

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## A CASE OF ENDOTHELIOMA OF THE PLEURA WITH A REVIEW OF NINETY-SIX CASES.\*

By **Henry S. Patterson, M. D.,**  
**New York City.**

*Chief of Clinic Department of Applied Therapeutics,  
Vanderbilt Clinic, and Deputy At-  
tending Physician, Hudson  
Street Hospital.*

(From Department of Applied Therapeutics,  
Vanderbilt Clinic.)

Malignant neoplasms of the pleura are not so frequent as to make a case report inappropriate, nor so rare as to make the results of an analysis untrustworthy.

Thanks are due Dr. Samuel W. Lambert for making available the notes of the case during the patient's stay in the New York Hospital, and to Dr. Symmes for the post-mortem findings and histological description.

A. W., aged 66, U. S., married, canvasser. History: Father died of apoplexy. One sister died of tuberculosis 15 years ago. Has had the usual diseases of childhood. At the age of fifty-nine he had paralysis of the right hand, with inability to close or open the part. He was treated with electricity and the hand is now as good as ever. He has had gonorrhea, but denies syphilis. He is an habitual smoker, but denies the use of alcohol. Four weeks previous to admission, the patient began to have sticking pain in the right side of the chest, especially marked on deep inspi-

ration, and at the same time began to cough. The cough was at first dry, but was later accompanied by scanty expectoration of mucus. He soon developed dyspnoea, which gradually increased so as to be manifest on the slightest exertion, even when walking on the level. As the dyspnoea increased, the pain became less, so that on taking a deep breath at present, he can do so without pain. He has had no chill or fever. His appetite is good, his bowels are regular. His chief complaint is cough and dyspnoea.

Physical examination: Temperature, 99.2 degrees, pulse 80, respiration 24. Patient is a poorly nourished man. The pupils are equal and react to light. Tongue moist and clean. No lymphatic enlargement. Heart: Apex felt in the sixth space, three fingers beyond the left nipple line, loudest sound at the same point. The sounds are of fair quality, there are no murmurs. Pulse is regular, fair size and force, there is no increase in tension and the vessel at the wrist is thickened. Lungs: Over the front of the right chest from the second interspace down, there is flatness, absence of breathing and fremitus, bronchial voice spoken and whispered. Over the right chest behind, from two inches above the angle of the scapula, the same signs are elicited. Over the left lung, there is sibilant breathing. Liver: Not felt. Spleen: Not felt. Abdomen: Negative.

The patient was sent home, and was tapped in his home the afternoon of October 14th. Sixty-four ounces of bloody fluid were obtained, which was collected in a sterile bottle, the sediment of which was later injected into guinea pigs by Dr. Wood. After tapping, behind the percussion note was resonant to the base, and

\*Read at the 142d Annual Meeting of the Medical Society of New Jersey, June 19, 1908.



all over the lower half of the chest there were distinct bronchial expiration and voice. Over the right lung in front from the clavicle to the fourth rib, there was absolute flatness, very loud bronchial breathing and voice, and no rales. On account of the bloody fluid, and the signs in the upper part of the right lung in front which might be interpreted as those of a solid tumor, it was thought that the patient was possibly suffering from an intrathoracic growth.

October 15th (nurse's report), temperature 98.6 degrees, pulse 88, respiration 20, pulse good, some prostration (9.00 A.M.). October 16th, temperature 97.4 degrees, pulse 80, respiration 20 (9.30 A. M., nurse's report). October 17th, feels much better. A little cough, occasionally raises. No shortness of breath. No sensation of fever.

Physical examination: From angle of scapula down, dulness and other signs as on admission. Apex beat in fifth space, one inch beyond nipple. October 18th (nurse's report), temperature 98 degrees, pulse 72, respiration 24 (4 P. M.). Complaining of attacks of dyspnoea.

October 19th, fluid returned to angle of scapula. Urine: Concentrated, heavy trace of albumen. October 21st, 78 ounces of very bloody fluid removed from right side of chest. After aspiration, resonance went to the base and the breathing is everywhere vesicular. All over the area previously occupied by flatness there is a friction rub with pleuritic fremitus, as high as midway between the spine and angle of the scapula behind, and the third space in front. The signs of solidification noted after the first aspiration in the upper and anterior part of the right lung are absent.

November 1st: Eighty ounces of bloody fluid aspirated. At third right rib and interspace a marked pleuritic fremitus and rub after tapping. November 11st, physical examination: From third rib down, flatness, absence of fremitus, breathing and voice. Behind, from middle of vertebral border of scapula down, same signs. Abdomen: Marked flatness and resistance in the suprapubic region as high as three inches from navel. Unretractible foreskin. Patient will not submit to a dorsal incision and catheterization. Rectal examination showed prostate enlarged, firm, not nodular; no growth felt in rectum. His weight is 176 3-4 pounds.

November 19th, signs of fluid same as on November 11th. Ankies swell a little.

November 27th, 100 ounces of bloody fluid aspirated. December 2d, becoming too weak to walk. Physical examination: Signs of large amount of fluid as on November 11th. December 4th, 6 ounces of bloody fluid aspirated, without change in physical signs. December 9th, physical examination: From third space in front down, flatness, absence of fremitus breathing and voice. Behind, from middle of vertebral border down, flatness, absence of fremitus and breathing but no change in voice. At this time it seemed that the condition might be due to aneurism, but an X-ray picture was negative. There were no symptoms to point to a primary growth in the stomach. With the distended bladder and hard prostate a carcinoma of that organ was thought of, but there was no evidence of bone metastasis, a condition quite frequent in that disease.

December 16th, "feels pretty well," not short of breath, very little cough. Physical examination: From third right interspace down, flatness. Behind, over area previously occupied by signs of fluid, marked impairment of resonance, and diminution of fremitus, breathing and voice. Weight, 167 1-4 pounds. December 24th, patient's wife reports that during last few days he has had very much cough, and has marked weakness, which he attributes to the daily use of small doses of salts. From this time on until his admission to the New York Hospital, the patient became progressively weaker. One analysis of his chest fluid showed forty grams of albumen per litre by Esbach. The cytological examination of the fluid was unsatisfactory, as it could not be done immediately after removal, owing to the distance of his home from the laboratory.

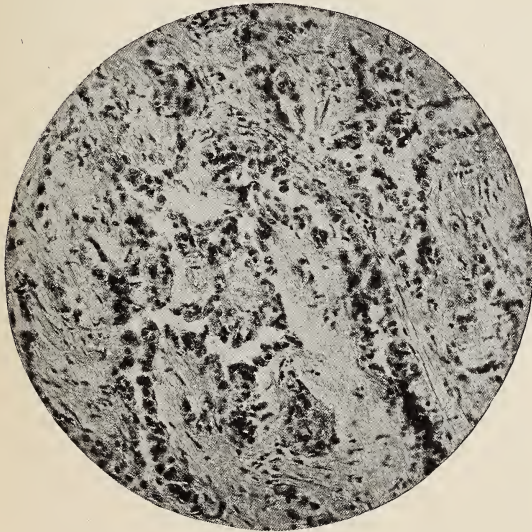
The guinea pigs died in February and showed no tuberculosis.

Admitted to New York Hospital, January 2d, 1908. Phymosis cut, retention relieved. January 14, 200 cc. bloody fluid removed from chest. The patient in the hospital was catheterized and irrigated several times daily.

January 17th, catheterized, large amount of blood passed. January 18th, catheterized and again large amount of blood passed. On the same day x-ray shows marked shadow over entire right chest, and small shadow at beginning of descending arch of aorta (aneurism). January 27th, hb. 70 per cent. January 28th, weight 133 1-2 pounds. February 3d, needle inserted in right chest, nothing ob-

tained. Considerable resistance in passing through pleura. February 27th, throat culture: Very numerous Klebs-Loeffler bacilli. (Epidemic but patient showed no symptoms.) February 27th, 2,250 units antitoxin (prophylactic). March 5th, patient died. While in hospital ran irregular febrile course probably from pyelonephritis.

**Autopsy Report** — Primary endothelioma of the pleura with metastases in both lungs, peritoneum, and in the mediastinal, bronchial and retro-peritoneal lymph nodes. Pyelonephritis. Ureteritis and cystitis. Hypertrophy of prostate.



MICROPHOTOGRAPH TAKEN BY DR.  
FRANCIS CARTER WOOD

Case II.—Age 66. United States. Married. Salesman. Ward G. Admitted, January 2d, 1908. Died, March 5th, 1908, 2:00 A.M. Autopsy, March 5, 1908, 12:30 P. M. Dr. Elser. Inspection: Body of a long, slender, emaciated, male subject. Rigor mortis present. Post-mortem lividity slight. Skin: Atrophic, shows a few circular, slightly depressed, pigmented scars over both shin bones. Panniculus adiposus slight in amount. Muscular system atrophic. Bony frame normal. Superficial lymph nodes normal, with the exception of those in the inguinal region, which are slightly enlarged and indurated. Eyes: Normal, pupils equal, moderately dilated. Nose and mouth are normal. Neck: A sharply circumscribed nodule, about the size of a walnut, is found in the left submaxillary region. This nodule fluctuates slightly. Skin over same is not adherent.

Chest asymmetrical. The lower portion of the left side of the chest bulges distinctly. Abdomen moderately distended.

Peritoneum: Shows a few greyish-white, opaque nodules, about the size of a French pea, in the perietal layer of the peritoneum corresponding to the right lumbar region. A series of these nodules can be traced from the diaphragm on the right side down to the cul de sac of Douglas. A few very small nodules are found on the posterior aspect of the bladder. The retroperitoneal lymph nodes are enlarged and on section show infiltration with tumor tissue.

Diaphragm: Fifth interspace right side. Sixth interspace left side.

Pleura: Right pleural cavity is completely obliterated. Left pleural cavity is free from adhesions and empty. The left lung does not collapse on opening chest and shows an advanced grade of emphysema. Right pleura: The parietal layer is markedly thickened, measuring from 1 to 1.5 c. m. in thickness, firmly adherent to thoracic wall. On section greyish-white in color with numerous irregular yellowish foci. In places the thickened pleura has the appearance of dense connective tissue, in others it presents a granular appearance not unlike the cut section of a glandular structure. The visceral layer is moderately thickened, about .5 c. m. in thickness and on section presents a similar appearance. Between these two layers there is an accumulation of fibrin, which has undergone a hyaline transformation. The lung on this side is partially collapsed. Immediately beneath the pleura a number of metastases are found varying in size from that of a French pea to that of a domestic pea. The lower lobe is infiltrated by a tumor mass, about the size of a small orange. This is irregular in outline and presents a mottled appearance, on section greyish areas alternating with yellowish, opaque areas. The right side of the mediastinum shows an infiltration with tumor tissue similar in appearance to that described above. The bronchial lymph nodes are enlarged and infiltrated with tumor tissue. Thymus is absent. Heart, small. The chambers are almost empty. The myocardium is brownish-red in color, consistence normal. The chambers are small. (Brown atrophy of the heart.) Valves are normal throughout.

Aorta: Normal in calibre and thickness of its walls, shows a slight grade of atheroma.

Lungs: Right lung: In addition to the



lesions recorded above is moderately congested. Bronchial tubes show congestion of the mucosa and contain a small amount of frothy fluid. Left lung: Shows a high grade of compensatory emphysema, is moderately congested in the dependent portions. The pleura on this side shows a number of greyish-white nodules resembling those found in the peritoneum. Bronchial tubes same as opposite side. Pulmonary vessels are normal. The entire specimen was placed in formalin for further examination. The thoracic duct is dilated but is not invaded by tumor tissue.

Spleen: Capsule normal. Consistence somewhat diminished. On section stroma increased, weight 4 ounces, prominent. Malpighian bodies indistinct. Pulp greyish-red in color. Suprarenals: Normal.

Kidneys: Capsule is thickened. Surface of the kidneys is irregularly nodular and finely granular throughout. The pelvis of both kidneys markedly dilated and filled with a purulent urine. The dilatation of the pelvis has led to atrophy of the pyramids. Normal markings of the organ are completely obliterated. The cortex is variable in thickness, reddish-brown in color, markedly opaque in appearance. (Pyelo-nephritis.) Both ureters are markedly dilated. The right ureter is about the thickness of the little finger, the left is about the size of the index finger. Both are filled with a purulent urine. The mucosa is deeply congested and eroded in places.

Bladder: Is distended with urine. The urine in the lowermost portion of the bladder consists almost wholly of pus cells. The mucosa is deeply congested. Prostate: Is markedly enlarged. On section reveals the picture of a glandular hyperplasia. Projecting into the bladder from the posterior wall of the pyramids there are two nodules, about the size of hickory-nuts, which, on section, show the appearance of glandular hyperplasia of the prostate.

Testicles: The tunica vaginalis on both sides is distended with a clear serous fluid. The testicles show the picture of brown atrophy.

Liver: Brownish-red in color, consistence slightly diminished, weight 49 ounces. The capsule slightly thickened in places. On section shows a moderate grade of congestion. The parenchyma of the organ is distinctly brown in color. Stroma not increased. The capsule reveals a few small metastases. Gall Bladder: Is distended with a dark greenish bile. The

mucosa of the gall bladder is normal. Ducts are patulous.

Gastro-intestinal Tract: Pancreas, aside from a slight degree of atrophy, is normal. Stomach: Is somewhat dilated and shows the lesions of an atrophic gastritis. The remainder of the gastro-intestinal tract, aside from a moderate grade of edema of the mucosa, is normal.

Esophagus: Is normal. The under surface of the diaphragm, on the right side, is studded with numerous metastases.

Head—Could not be examined. No permission.

**Microscopical Examination.**—On microscopical examination, it is found that the tumor is composed of a connective tissue framework, arranged in the form of alveoli, lined by endothelial cells. The connective tissue itself is comparatively mature, being for the greater part arranged in non-cellular, poorly nucleated, homogeneous bands, varying in thickness. In places, the connective tissue is densely infiltrated by round cells; in still other places, it appears to be undergoing hyaline transformation. The connective tissue, as a whole, is very poorly vascularized. The alveoli are of various sizes, some being long and narrow, others short and wide, so that one gains the impression that their size has been influenced by pressure.

The cells lining the more narrow alveoli are arranged in single layers. The individual cells are comparatively large in size, flattened and differ in contour, some being roughly oval in shape, others approaching a square in outline. Each cell encloses a large, rounded, deeply staining nucleus, in many of which distinct nucleoli are visible. The cytoplasm of the cells is pale, staining faintly pinkish with eosin, and appears to be smooth and homogenous in structure. In the larger alveoli the cells are very large in size, but correspond in their general structure to those already described. In these alveoli, however, the lining cells are frequently arranged in layers made up of two or more tiers. Desquamated cells are not uncommonly to be observed lying free in the lumen of the alveolus.

The primary new growths of the pleura present themselves as rare growths that are frankly sarcomata, or as less infrequent neoplasms that have come to be called endotheliomata. The pathogenesis of the latter, however, has been a subject of much contention and is still undecided.

Bock<sup>1</sup> and Glockner<sup>2</sup> have collected most

of the cases, all of which are now considered. Consequently with them, with the case here reported, and with those of Otto<sup>3</sup>, Lewis<sup>4</sup>, Scagliosi<sup>5</sup>, Poniatovski<sup>6</sup>, Bordot<sup>7</sup>, Burtseva<sup>8</sup>, two of Siragusa<sup>9</sup>, Vaccari<sup>10</sup>, Schreiber<sup>11</sup>, three of Bonheim<sup>12</sup>, three of Torri<sup>13</sup>, Quinke<sup>14</sup>, a case of Schultz<sup>15</sup>, and one of Neelson<sup>16</sup> not included in Bloch's article, the cases of Lemaistre<sup>17</sup>, Perls<sup>18</sup>, Gay<sup>19</sup>, Malassez<sup>20</sup>, two of Lebert<sup>21</sup>, Hofmohl<sup>22</sup>, Volkmann<sup>23</sup>, two of Biggs<sup>24</sup>, Colin, a probable case of Erben's<sup>25</sup>, on which no autopsy was performed, two of Titoff<sup>26</sup>, Mlodseyevsky<sup>27</sup>, Krupetsky<sup>28</sup>, Poggenpol<sup>29</sup>, and Szinnye<sup>30</sup>, the analysis considers ninety-six cases. Unfortunately the periodical in which Brandam's<sup>31</sup> report appeared could not be sent from Washington.

**Etiology** — There are no features discoverable in studying these cases that throw any light on the causation of the disease. The youngest recorded case was that of Hofmohl, occurring in a male aged seven years. The oldest patient on record was the case recorded by Poniatovski, the patient being a Russian sailor, ninety years of age. While the ages of all the cases are not recorded, the occurrence of the disease by decades so far as it can be determined is as follows: Between 1 and 10 years, one case; between 10 and 20 years, two cases; between 20 and 30 years, three cases; between 30 and 40 years, eleven cases; between 40 and 50 years, twenty-two cases; between 50 and 60 years, twenty-five cases; between 60 and 70 years, fifteen cases; between 70 and 80 years, four cases; between 90 and 100 years, one case.

Therefore, while the disease can occur practically at any age, and does occur most frequently during those years within which one is most likely to manifest malignant disease, it will be seen that there exists no age relation to primary malignant disease of the pleura which is sufficiently emphatic to be a diagnostic aid.

In a number of the cases the sex of the patient is not recorded. Fifty-three of the cases were males, and thirty-two females. Race seems to play no part in the frequency of the disease. By far the majority of the cases are reported from foreign sources, but possibly that is accounted for by the greater ease of obtaining autopsies in some parts of Europe, or by a greater familiarity with the disease. There have certainly been cases in this country which have never appeared in the literature.

**Pathology.** — In the cases from which conclusions can be drawn, the condition

was primary on the left side forty-four times, on the right side thirty-five times. It was regarded as primary in both pleura in the cases of Meslay and Lorraine<sup>32</sup>, Gay, Melassez, Colin<sup>33</sup>, and in two cases of Lebert. The lesion has occurred either as a general thickening of the pleura, or as a collection of diffuse or confluent nodules, varying in size from the head of a pin to a hazelnut. The color of the tumor varies. It may be white, gray or yellow. The pleural cavity may be partially or completely obliterated by the growth of the tumor. The lung is almost always retracted, and often atelectatic.

The whole pleura has been involved in twenty-four cases, in ten the lesion being a diffuse thickening, in eight a nodular involvement, and in four a diffuse thickening with the formation of nodules. The parietal pleura was affected alone in eight cases, the visceral alone in two. The diaphragmatic pleura was involved alone in one case, and the visceral and mediastinal together in one case. In those cases not involving the whole pleura, the nodular type alone appears more often than the diffuse thickening, and the two in combination more frequently than the diffuse thickening. The lesion occurred as a large discreet tumor in three cases.

Eppinger<sup>34</sup> has observed the presence of numerous small cysts. Rossier<sup>35</sup> has noted the development of hydropneumothorax and Podack<sup>36</sup> has also observed it. A milky fluid has been observed by Chwostek<sup>37</sup> to exude from the cut pleural nodules. Schweniger<sup>38</sup> and Glockner, *loc cit*, have recorded chylous ascites.

Tissues invaded by direct extension: Lambrecht<sup>39</sup> and a few others have recorded involvement of the intercostal muscles. Fraenkel<sup>40</sup>, Harris<sup>41</sup>, Teixeira de Mattos<sup>42</sup>, Kawders<sup>43</sup>, Glockner, Eppinger, Lepine<sup>44</sup> have reported an involvement of the bony and soft parts of the chest wall, the growth in the case of Eppinger even embracing the spinal dura mater. In Dieulafoy's<sup>45</sup> patient the tumor involved the first three lumbar vertebrae, the sternum and three false ribs on the left side. Schreiber, Poniatovski, Biggs and Otto have observed subcutaneous tumor tissue continuous through the chest wall with the intrathoracic growth.

In Poniatovski's case the growth extended through the diaphragm into the spleen, which presented metastases in addition. Poniatovski, Meslay and Lorraine, Pirkner<sup>46</sup>, Gougenheim<sup>47</sup>, Glockner in two



cases, Reidinger<sup>48</sup>, Lepine, note the involvement of the pericardium by direct extension. Glockner and Lepine have also observed the invasion of the superior vena cava. Scagliosi and Podack have noted tumor extensions in the muscles of the back, along the line of exploratory punctures.

**Metastases.**—In nineteen cases the opposite pleura has been the seat of metastases, Delafield having noted the occurrence in two autopsies. Secondary deposits have been recorded as occurring in the liver nineteen times; in one or both lungs eighteen times; in one or both kidneys thirteen times. The peritoneum has presented metastases ten times; the spleen six times; one or both suprarenals six times; the pericardium six times; the heart four times, twice in the interventricular septum. Metastases have been found twice in the bladder and three times in the ovaries. Deposits have been found twice in a bronchus, and once each in the right paracentral gyrus of the brain, the thyroid gland, jejunum, choroid and sphenoid bone. The under surface of the diaphragm and capsule of the liver have been frequently invaded. In the lymphatic system, the bronchial nodes have been invaded sixteen times; the mediastinal eleven times; the retroperitoneal eight times; the mesenteric five times; the auxiliary five times; the ganglia of the hilus of the lung twice; the prevertebral, the supraclavicular, deep cervical and submaxillary once each. The enlarged axillary deep cervical, submaxillary, supraclavicular, and in three instances the subclavicular nodes were palpable during life, a fact directly bearing on diagnosis.

**Pathogenesis.**—The origin and exact classification of this tumor have been a source of great discussion and much controversy. While it would be presumption on the part of any other than a skilled pathologist to attempt to decide such an important question, it does not seem out of place to review some of the opinions of those whose ideas are worthy of respect. In 1874 Wagner<sup>49</sup> advanced the belief that the tumor originated in the endothelium of lymph vessels. Podack has observed the transition of the lining of lymph vessels and spaces into tumor tissue. He thinks the term carcinoma applied to these primary growths of the pleura incorrect, and suggests alveolar endothelial sarcoma.

Hofmohl regarded his case as endothelial sarcoma. Ziegler<sup>50</sup> regards the pri-

mary malignant tumors of peritoneum and pleura as sarcomata of the endothelial type, while Birch-Hirschfeld<sup>51</sup>, speaking of the growths of the peritoneum, mentioned primary colloid cancer, but he regards such neoplasms as probably being sarcomata. Torri regarded his first case as a lymphangio-sarcoma, originating from the endothelium of lymphatic vessels and spaces. He called his second case "hæmolympfangio-sarcoma," because the endothelium of both blood and lymph vessels was involved, while his third, he thought, started from the lymph vessels.

Burtseva regarded her case as originating from the endothelium and perithelium of blood vessels. Siragussa reported his case as arising from the endothelial cells of the lymph vessels and spaces, while Bohme<sup>52</sup> designated his case as sarco-carcinoma. Neelson, on the other hand, regarding the disease as an infectious tumor, has called it "lymphangitis carcinomatodes," after the example of Schottelius<sup>53</sup>, who suggested the name. Schweniger, taking very much the same view as the two preceding writers, has made use of the term lymphangitis proliferans. Scagliosi suggests that tumors of the pleura can originate from the endothelium of lymph vessels, when they are endotheliomata; or from the covering cells of the pleura when they are carcinomata. Bonheim says that Benda<sup>54</sup> has apparently seen the transition of pleural endothelium into tumor mass, but as a result of the Hertwigs' investigations he has come to believe for embryological reasons that the pleural growths in question are carcinomata.

Miller and Wynn<sup>55</sup>, while regarding their case of peritoneal tumor as a connective tissue neoplasm say: "We are faced with the fact that a considerable number of authorities express it as their opinion that tumors arising from the endothelium of peritoneum or pleura ought to be regarded as epitheliomata. This is partly because cases like Benda's have been met with in which a tumor growth arising from a serous surface has assumed the character of an epithelioma, but much more on account of the alteration of opinion which has occurred in Germany with regard to the embryology of serous membranes. The original teaching of His was that the endothelium of the pleuro-peritoneal cavity was derived from the mesoblast, and was of connective tissue nature. According to the brothers Hertwig, how-

ever, the endothelium of pleura and peritoneum, although arising from the mesoblast, is essentially epithelial in its character. This is supported by the fact that the epithelium of the kidneys and ovaries arises from the lining cells of the peritoneum. Many pathologists see in the behavior of the endothelial cells in inflammatory processes another argument for 'their epithelial character.' Hansemann<sup>56</sup>, regards the term endothelioma in general as superfluous, and thinks that tumors classified under that heading can all fall into one of the following groups: 1. endothelial carcinoma; 2. endothelial sarcoma; 3. carcinoma sarcomatodes endothelial; 4. endothelial tumors with specifically developed stromas; (a) cylindroma, (b) myxoma, (c) chondroma, (d) scirrhous, (e) mixed forms with transition into sarcoma or carcinoma; 5. endothelial adenoma.

Ribbert<sup>57</sup> says: "In the walls of the pleural and peritoneal cavities, and rarely in the pericardium, there occur tumors that are often interpreted as endothelioma, but in my opinion are doubtless carcinoma. \* \* \*

These tumors have been called endothelioma because their cells were assumed to have originated either from the surface of the serous coats, the cells of which were supposed to be endothelial, or from the cells of the lymph passages running through the serosa, but neither mode of origin has been surely proved.

"If the tumors really originated from the surface, the name endothelioma is not to be used in this connection. I would then call them epithelioid carcinoma-like tumors, until those cells were surely shown not to be epithelial. \* \* \* But even the origin from the surface cells is not proved, and could not be demonstrated in the tumors so far examined. They have progressed far enough to explain any connection with the covering cells as of a secondary nature. Only the inception of the tumor could decide the question, and they have not been found. \* \* \* Just as little has been shown in regard to the origin of these tumors from the endothelium of the lymph vessels. Observers have described the passing of endothelium into the tumor (Glockner), but such descriptions have been erroneous."

**Character of the Fluid.**—In nine cases there was no fluid found in the chest, in most instances on account of the obliteration of the pleural cavity. In sixty-five cases the fluid was hemorrhagic. It was clear serum in only two cases. In two

instances it was purulent when first observed; in one case it changed from sanguinolent to purulent, while in another a similar transformation from a clear fluid occurred after the resection of a rib for drainage, and in one of the cases of pneumothorax the fluid became purulent after the development of that complication.

Bard<sup>58</sup> found in a case of cancerous peritonitis originating about the uterus, and in two cancerous pleuritis, one secondary to a tumor of the lung, the other to uterine disease, that after centrifugalizing the fluids, the decanted effusions gave a strong blood reaction with guaiac. On the other hand, centrifugalized fluids from a case of tuberculosis and from a case of pleurisy during the course of typhoid fever gave no guaiac reaction. He, therefore, suggested that cancerous effusions were possessed of greater hæmolytic activity than others, and advised the trial of his procedure as a possible diagnostic measure. The hæmorrhagic fluid is such a notable and frequent feature of these cases that when it is met with, one must immediately suspect the possibility of malignant disease of the pleura.

**Fluid in the Pericardium**—The pericardium has been the site of non-malignant lesions in eight cases. Bloch reported a fibrinous exudate, and Engelbach recent cardio-pericardial adhesions of a purely inflammatory character. Meslay and Lorraine and Schultze-Vellinghausen<sup>59</sup> have reported the presence of clear fluid. Ferrio and Rovere<sup>60</sup> have mentioned pericardial fluid, but its character was uncertain. Harris, Pitt<sup>61</sup> and Fraenkel have noted bloody fluid.

**Cytology**—In a case with clear fluid, Gutman<sup>62</sup> found the cells to be composed of lymphocytes and polynuclears in equal proportion. Rossier's case showed "epithelial" plaques and many cells in a state of fatty degeneration. Neelson has reported blood elements and "epithelioid" cells in plaques. In Gebhardt's<sup>64</sup> case, the fluid contained voluminous vacuolated cells, occurring in masses; these cells also occurred in the sputum. Hebb<sup>65</sup> has recorded the presence of large "epithelial" cells, resembling cancerous cells. Fraenkel<sup>62</sup> has observed round or polyhedral, polymorphous "epithelial" cells, some occurring in masses, containing vacuoles and a large nucleus. Ferrio and Rovere noted in one case a fluid of a specific gravity of 1023, which contained large isolated and grouped cells, with granular protoplasm and a well stained nucleus, and no vacuola-



tion. In another case they reported an effusion which contained vacuolated cells and fat globules, often in groups, and they state that tissue extracted by puncture during life was clearly neoplastic. Schultze-Vellinghausen records a fluid containing blood elements and small conglomerate cells with one or more nuclei. Meslay and Lorraine's case showed blood elements and numerous cells single and in groups, larger than endothelial cells, with large nuclei difficult to stain, some presenting protoplasmic vacuolation, others two nuclei and resembling tumor cells. In Bloch's case the fluid showed blood elements and large cells isolated or in clumps, containing vacuoles very irregular in form, and with poorly staining nuclei. Scagliosi reported as occurring in the fluid from his case numerous large, fatty "epithelial-like" cells, vacuolated and often conglomerate. In a probable case of malignant disease of the pleura without autopsy, Erben found numerous eosinophiles, and in the exudate, cell appearances which reminded him of the so-called "Leyden cancer parasite," an amoeba which Leyden and Schaudinn<sup>66</sup> have found in two cases of cancerous ascites.

Quincke has recorded in a malignant fluid red cells, a few lymphocytes, fat corpuscles, and cells 20 to 25 micra in diameter singly or in groups up to one hundred. Lewis describes a fluid of 1000 specific gravity, with endothelial cells, polynuclears in excess and some large mononuclear cells, not resembling epithelium. Bordot mentions Ehrlich<sup>67</sup>, Quincke and Fraenkel, as being among the pioneers in this branch of investigation, and states that Quincke was the first to emphasize the importance of voluminous, oedematous cells in effusions of malignant origin. Bordot says: "Rondeau<sup>68</sup> in an important work on cancer of the lung and pleura states his belief that in an effusion it is difficult to distinguish an endothelial cell from one derived from a malignant tumor. He thinks, however, that the cells he found after an examination of a series of effusions were cancerous, and he based his opinion on the form of the cytological elements, which do not correspond to the other cells of the effusion; he also draws his conclusions from the abundance of the cells in the fluid, and the vitality of the nucleus which is indicated by a budding aspect." In his own case Bordot found voluminous cells of unequal sizes arranged in bunches of two to six, the largest two

or three times bigger than endothelial cells. The protoplasm stained deeply and was studded with numerous vacuoles. A phagocytic action was inferred for these cells from the remains of red cells and leucocytes which they contained. Bordot differs with Rondeau, in that he places no importance on the number of suspicious cells to be found in the fluid, and points out the wisdom of searching for them with a low power objective. Siragusa in one case recorded endothelial cells filled with granules, showing many vacuoles, fat droplets and red cells.

Nattan-Lorrier<sup>69</sup>, in summing up the subject, says: "The presence of polymorphous, cellular, granulations, be they ever so small; the presence of refractile vacuolated cells, irregular, with multiple nuclei of variable aspect; the rarity or absence of endothelial placards, polynuclears and lymphocytes; the absence of eosinophiles, such are the characteristics which permit the recognition of cancerous pleurisy, primary and secondary, hemorrhagic or serofibrinous."

**Symptoms and Course.**—The disease ordinarily manifests itself in the beginning as a pleurisy with sticking pain in the side, cough with scant if any expectoration, and with a variable degree of dyspnoea. As the fluid increases in amount, the dyspnoea does also, but the pain decreases. The fluid reaccumulates rapidly for some time, and then as the pleural leaflets grow together and the tumor obliterates the cavity more and more, the return of the fluid is checked, although abnormal physical signs persist. Absence of fever and relentless emaciation are striking features in the program of the disease. Symptoms referable to interruption of function in organs secondarily involved may develop. Collier,<sup>70</sup> for example, has recorded an external stricture of the oesophagus from nodules on the inferior surface of the diaphragm.

All cases terminate fatally, the shortest courses being, it seems, in the case of Delafield<sup>71</sup>, Kauders, Gougenheim and others, varying from the time of onset of symptoms to death from a little less to a little more than a month. The longest case on record is probably Burtseva's, which covered a period of three years. The average duration is probably between six months and a year.

**Diagnosis.**—A malignant new growth of the pleura is at once suspected when bloody fluid is found in the chest. Before

the diagnosis can be established, a number of conditions must be excluded. In the first place, tuberculosis must be ruled out. The surest way to accomplish this is to inoculate guinea pigs with the fluid. To obtain the best results the fluid should be allowed to settle in a sterile bottle on ice for a few days, and then the clot or sediment should be injected into animals. The objection to this diagnostic procedure is the length of time needed to obtain results. The tuberculin reactions, the subcutaneous, optharmo-tuberculin and Von Pirquet's reaction are useful, but in the presence of bloody effusion, a positive result from one of these tests does not necessarily prove that the pleuritic lesion is tuberculous, for there may well be a hidden focus elsewhere. It seems, therefore, in suspected malignant disease of the pleura, that negative tuberculin reactions have a decided significance. Inoscopy and other methods of demonstrating tubercle bacilli are available to those whose experience with them has been sufficiently encouraging to warrant further trial.

Aneurism must be carefully considered before arriving at a final judgment. Physical signs and x-ray pictures are the methods by which this problem is attacked. Having found the evidence of aneurism and tuberculosis wanting, a primary growth elsewhere than in the pleura must be excluded. The gastro-intestinal, the genito-urinary tracts, the antrum of Highmore, the larynx, the sites of bronchiogenic tumors, must all be studied. The analysis of the stomach contents and stools with particular reference to the occurrence of occult blood; the inspection of the lower bowel with an appropriate instrument; cystoscopy, and transillumination of the head, should all be practiced with negative results, before a new growth elsewhere in the body can be excluded.

Having approached the diagnosis by methods of exclusion, it is now in order to consider what is to be regarded as direct clinical evidence of the disease. Persistent bloody fluid, non-tuberculous, with progressive emaciation usually unaccompanied by fever, make up a suggestive picture. In a number of cases direct evidence has probably been afforded by cells in the fluid. The only absolute way of making the diagnosis is the microscopical examination of tissue which has come to the surface by extension or metastasis. This has been possible in thirteen cases only.

Where the fluid is not hæmorrhagic, the

diagnosis is a little more difficult, but is accomplished in the same way. Where no fluid is present, the signs of thickened pleura, the advancing cachexia, and negative evidence of other conditions, are sufficient to establish a tentative diagnosis. In the cases of Lewis and Pirkner, the diagnosis was made at operations for pleural drainage.

**Treatment** — That this condition is an incurable disease cannot be taken as an argument that there is no treatment. The management of a patient so afflicted and of his family may make a terrible situation tolerable, or may result in total failure.

In the first place, it is wise to keep the attention of all concerned focused on the fluid, because its removal is almost always attended by relief, and because there is a chance of its total disappearance. Whether the patient objects to the aspiration depends upon how it is done. Comfort in this operation seems to be determined by a sharp needle more than by any other factor. The skin may be frozen by ethylchloride, care being taken to allow the frost to wear off before puncturing; otherwise the needle will have to go through a tough leathery layer, and run the chance of bending or breaking. As the disease progresses and the pleural leaflets become more involved and more unyielding, considerable suction is required to empty the chest. After the aspirations, pain may be alleviated by local applications, and by coal-tar products, with or without morphine. In the last stages where pain, weakness and discouragement are striving for the upper hand, morphine nearly to the point of toxic effects is indicated.

Symptoms referable to metastases must be treated as they arise. The only justification of surgical treatment seems to be the presence of a purulent effusion.

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## DISCUSSION.

**Dr. Philip Marvel, of Atlantic City,** said that he would like to ask a question. Dr. Patterson had referred to metastasis and had given the clinical history of the case. Dr. Marvel wished to know whether malignant growths of the pleural cavity are more susceptible to metastasis than is a similar tumor elsewhere.

**Dr. Charles A. Rosenwasser, of Newark,** said that in days gone by he had had cases of inoperable diseases, and he thought it important, when the case is pronounced inoperable, not to sit down and let the patient die, but to do all that could be done to give relief. He asked whether Dr. Patterson's experience in the use of methylene blue in the case of inoperable sarcoma had been that the patient had been made more comfortable by its use, and whether life had been prolonged.

**Dr. Norton L. Wilson, of Elizabeth,** said that in sarcoma of the antrum, he thought it better to leave the tumor alone. He had seen three cases of his own and several cases of colleagues in which operative interference had made the patient worse and caused intense suffering. He thought a better plan of treatment

than operation was simply to keep the patient under the influence of an opiate.

**Dr. Patterson**, closing, said that one of the principal reasons that he had for presenting his paper was that this case, which he had run across last winter, was the ninth that has appeared on record in the literature of this country. He knew, however, that there had been other cases seen in this country that had never been reported. Dr. Thatcher, of New York, when he had presented the specimens at a society meeting, had said that he had found cases in hospital records. Dr. Patterson said that if his paper should stimulate an interest in the subject on the part of the Medical Society of New Jersey, and a desire to recognize the condition, he would feel very much gratified. He would himself never have been able to recognize the case, had it not been for an article of Dr. Delafield's, in which he reported similar cases. Dr. Patterson was thus able to make a probable diagnosis in this case, which was confirmed at autopsy.

As to the likelihood of metastasis from the pleura, spoken of by Dr. Marvel, Dr. Patterson said that theoretically one would imagine that the pleura, being so rich in lymphatic drainage, would be a primary site from which metastases would be very frequent and extensive; but in going over the majority of the cases, those in which metastasis was mentioned represented only about twenty per cent. Probably taking carcinoma of the breast, uterus and stomach, for example, one would find that metastasis in fatal cases would represent more than twenty per cent. Theoretically, one would expect, owing to the very extensive lymphatic drainage, that the pleura would be a primary site from which great and extensive metastases would frequently occur; but as a practical point, probably the percentage of metastasis in these cases is very much less than in others. Regarding the use of methylene blue, Dr. Patterson had had no experience. In this case, morphia seemed to fulfill the indications very nicely, so that he was not forced to try some of the more unusual methods.

In his paper, he said, his reference to sarcoma and malignant growths of the antrum was not in relation to operative interference, but simply as one of the ways in which one could eliminate primary growths elsewhere than in the pleura. He personally had had no experience with the primary growths in the antrum, except to suspect them in two cases, and to have them found by the nose and throat specialists. He was glad to know what the impression is as to the surgical propriety of interfering with them.

Another point that he had spoken of was that in the use of the needle care should be taken to have the frost produced by the ethyl chlorid pass off before the needle is introduced. Dr. Patterson said that though this might sound elementary, he had once had an experience, when he was in a hurry in tapping a patient in a tenement. He did not wait until the frost had passed off, and the pressure necessary to force the needle in had rather hurt the man, who gave a movement as the needle got under the edge of the rib, with the result that the needle was left sticking in the pleural cavity and could not be extracted. Dr. Patterson took the patient to a hospital that was near, and had x-ray pictures made. The needle could then be extract-

ed only by making a large incision. Not a year goes by, said Dr. Patterson, that a student or a recent graduate does not come back and say that he has recently had the unfortunate experience of having a needle break off in the patient's chest; and it is usually found that this has happened through not paying proper attention to the use of the ethyl chlorid.

Dr. Patterson said that he was highly sensible of the honor of appearing before the Medical Society of New Jersey. Though he had not the privilege of practising in that State, he was a native of it and had had very pleasant relations with the medical men of the society.

## THE RESULTS OF INJURIES TO THE SKULL.\*

By **A. J. Walscheid, M. D.,**  
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The results of skull injuries are immediate or remote, and not controlled by the injury or fracture of the calvarium itself, but solely and only by the effect of this injury or fracture upon the brain. This cerebral disturbance may manifest itself in various degrees from a minimum agitation of the molecular integrity of the central neurons to an impairment or absolute loss of their functioning power.

With this extensive range of encephalic derangement, and with the knowledge that this disturbance may not pronouncedly show itself until a long time after the injury, we should never forget that each and every cephalic trauma ought carefully to be examined, studied and observed over a longer period than the immediate effects of the actual injury exist. In other words, no injury of the head, no matter how slight, should be considered mild or innocent. It is not the local injury which should place the physician in an apprehensive position, for even the slightest contusion of the head may be followed by the severest cerebral manifestations, and conversely the severest (scalp wound) with depressed fracture may never present any mental derangement of any kind. As illustration, I submit the following cases: J. B., age thirty-six, married, miner, previous history negative, personal and family history negative. He has always been well, of even temperament, jovial disposition, taking a great interest in his home—a small farm and horse. Never indulged in alcoholic beverages to excess and was a moderate smoker. Was very popular

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with his companions and never had a quarrelsome nature. Eight years ago, while walking down the cellar stairs, in his home, it being dark, he tripped and fell about a distance of four feet, striking the left side of his head in the parieto-frontal region, causing a scalp wound about one and one-half inches long. He was slightly stunned but walked a distance of two miles to the doctor, who diagnosed simple scalp wound, which he sutured. His homeward trip was uneventful with the exception of an attack of dizziness which he characterized as a "fainting spell." At home he complained of a severe headache and went to bed. There were no focal signs of any kind, the only untoward symptoms being a continuous headache with dizziness when attempting to arise from his bed. The scalp wound healed without any complication. The patient returned to his work in the mines. He never seemed the same after the accident, was lazy, melancholic and irascible, quick to anger and disinterested in his work. He complained of a continuous throbbing in his head and headache and his dizziness made him give up his position. About six months after the injury he developed an attack of epilepsy, the fit lasting about twenty-five minutes. After this attack he rapidly became worse in disposition, and a complete mental change took place; he neglected his home, his farm and horse, and sat around brooding and moaning, with his right leg crossed over the left knee, holding the right side of his face, striking it at times, saying that there was something in his jaw. At night he would sleep with two fingers of his left hand jabbed into his mouth strenuously holding his cheek. He developed, during the period of eight years, five epileptic seizures and when he came under my observation he was the picture of abject despair, suffering from a pronounced case of melancholia. He did not recognize his children, or their names; the only person having any control over him was a spinster sister. His sense of orientation was gone and he would sit for hours in the same position, rocking to and fro continuously. He did not remember the injury, and would never join in any conversation except to cry out, "It's here! It's here!" suiting the action to the word by striking his right cheek. The small finger of his right hand continuously twitched and this fibrillary contraction extended to the interossei muscles between the gold and lit-

tle finger of the same hand. If he was asked where he felt ill, he would point to his right cheek, pulling it and saying, "This is the place you want to doctor." He had been confined in an asylum and was somewhat improved.

Examination of his shaved head showed a scar on the left side of the parieto-frontal region crossing the coronal suture one-half inch from bregma, extending more towards and over the frontal bone. The scar was tender, adherent and a slight depression existed. Examination for choked disc proved negative. The diagnosis was depressed fracture of internal table, involving the frontal lobe and motor area, focally affecting the hand centre, located in upper portion of ascending central convolutions, involvement of frontal lobe causing traumatic melancholia. Prognosis guarded, advising exploratory trephining.

Operation showed depressed fracture with dural adhesions involving the frontal lobe, superior and middle convolutions, and extending back over motor area. Result after operation—cured until about three months ago, when I was informed that the old condition had recurred.

The second case is A. D., age twenty-six, tunnel worker. Stone loosened itself from roof of tunnel, striking the patient (while in a stooped position) in the back of the head, causing a compound fracture of the occipital bone involving the posterior portion of parietal and temporal bones. The membranes and brain substance were lacerated. He was not unconscious; shock was not severe. Operation—elevation of edges, removal of depressed bone with spiculæ, through cerebral toilette with dural suture. Wound healed by first intention and the man returned to work at the end of four weeks against my orders and is now engaged as a laborer. He suffers no inconvenience, except an occasional headache. If he rises suddenly from a stooped position, or raises his eyes upward he becomes dizzy.

The first case is instructive in so far that the injury was simple, causing such deplorable and sad results; the second, primarily that the man was not killed, secondarily that he made an uneventful recovery with the back of his head literally smashed and, to the present time (two years since accident) not showing any mental complications. Furthermore, the first case upon removal of the depression and adhesions recovered, but before the patient had time to regain his complete mental equilibrium,

adhesions form again bringing about a recurrence of the former symptoms. In the second case, there have never presented themselves any mental symptoms to even suspect that he ever had such a serious brain injury.

These two cases direct our attention to another line of reasoning which must be intelligently considered whenever a skull injury occurs, namely, the effect which the trauma has upon the centres with which it comes in direct contact or which it indirectly influences. With a skilled knowledge of cerebral localization—as to the location of the various motor centres, and a realization of the fact that the higher psychological, mental and moral areas are situated in the superior middle and inferior frontal convolutions. A prognostic outlook as to ultimate results of brain injury, in accordance with its location on the skull, is not very difficult, and so it is that injuries which involve the forehead, never exhibit any distinct focal lesions unless they extend beyond these gyriuses or by contracoup affect other parts of the brain. These injuries do, however, present a line of symptoms which indicate an entire change in the patient's character. Those traumata which affect the skull posterior to the ascending frontal convolutions and fissure of Rolando, result in a direct influence upon that part of the brain known as the motor area including those active centres which affect the special and prominent senses. And the result of an injury to these parts characterises itself by an exhibition of their impairment or entire loss of function.

To collate in an intelligent interpretation the various degrees of this integral mental disturbance we classify them under distinctive headings, in accordance with the peculiar line of symptoms which they respectively present for objective observation and which laboratory and clinical experience have shown to be indicative of the condition existing. In this way we are able to differentially diagnosticate the conditions of concussion, contusion, laceration or compression of the brain, either when they exist alone or together. At times, however, the complexity of symptoms prevent their correct segregation and a diagnosis is not only difficult but next to impossible.

The object of this paper is not to go into detail of symptoms existing when these conditions individually or collectively present themselves, but rather to discuss in a

general way the effect the injury has upon the cerebral economy when it has produced these conditions. There are, however, a few finer differential points which I cannot refrain from mentioning, as they are always prominently connected with the individual line of injuries and prove of value in diagnosis.

The most important of these is the mental disturbance which results from skull injuries. This may vary from a slightly dazed, stunned, dizzy feeling to a semi-conscious, stuporous or comatic condition, or it may range from a restless, excitable, delirious state, at times terminating in a convulsion, paralysis or death. These mental symptoms may continue from a few moments to days and the patient recover. *The length of time which they exist bears no relationship to ultimate cellular recovery and the cellular disturbance is not any further affected by their continuance. They are merely, to some extent, prognostically symptomatic of the extent of the cellular involvement* which the injury has produced. I have seen cases of profound concussion remain unconscious for days and recover uneventfully, or as Von Bergmann says, "transiently manifest themselves." It is not the degree of unconsciousness which is of any importance, but solely the amount of damage which has involved the cells themselves. The effect from cellular damage manifests itself in the shape of a persistent headache and a dizziness upon rising. This follows the mental disturbance before mentioned and upon its continuance depends the result of ultimate recovery. Its severity with dizziness correlates itself to the amount of cytoid disturbance which the injury has produced. Cases of concussion followed by headache and dizziness should be carefully watched and not allowed out of bed too soon after the injury. It is inadvisable to allow these patients to use their mental functions before the brain cells have had time to recuperate and a too hasty return to mental activity in our everyday strenuous existence, is more conducive than anything else to the development of chronic mental disorder.

The enjoined mental rest allows the higher neurons to regain their proper circulation, their normal stamina and physiological function. Time is the only remedy for this, and I make it a rule wherever possible to keep my patients from any kind of work or worry for at least six months after the injury. In *concussion*, unlike contu-



sion and laceration, *there is no irritative lesion* but merely a *disturbance of molecular integrity* and general shaking up of the brain. As soon as the concussive force is over the cells return to their normal position and physiological cellular rest is now the essential line of treatment to be followed out to allow for the re-establishment of normal conditions. Headache and dizziness are the two subjective symptoms most prominent in satisfying the diagnostician, as to the severity of the cerebral damage, and its existence requires the closest attention. In a series of one hundred carefully selected cases of concussion in railroad and tunnel men, I have found in every case, which manifested headache and dizziness, that convalescence was protracted and, if placed at work too early, ultimately developed complications. If, on the other hand, the patient was carefully treated and mentally rested the symptoms were in forty-five (45) per cent. made to disappear, thirty-five (35) per cent. modified and twenty (20) per cent. unchanged. Certainly a percentage of this kind justifies the time spent in treatment.

Patients who are not allowed the proper amount of rest stimulate the molecular disturbance and cellular neurons while in a physiologically valetudinary condition, they are continuously irritated to mental activity leading eventually to their inefficiency for reflex action, and causing a general cerebraesthesia to arise, manifesting itself by a general weakness in those characteristics which go to make up an equally balanced man. These manifestations exhibit themselves in the shape of a dull headache intermittent and aggravated at the slightest exertion, a feeling of numbness in the head, loss of memory, and dizziness increased when climbing heights, or when looking up suddenly on rising from the stooped position, or upon running or any active movement, irascibility and sudden outbursts of temper and an intolerance for alcohol. These patients are unable to endure any over-exertion, are easily fatigued, making them easily discouraged before a task is half completed. Mental work aggravates their headache. This cerebraesthesia if not treated may lead to neurasthenia, melancholia and insanity. Especially is this true in those vulnerable types which have been congenitally instilled with a degenerative or mentally weak stigma, or those individuals whose general mental training has been considered of absolutely no importance. This unfortunate class of

individuals is the one most susceptible to mental disturbance.

I cite this case as typical of cerebraesthesia and irascible insanity:

G. H., age forty-four, brakeman on railroad. Previous family history: Father was insane and brother died in an asylum. Personal: Has always been well, never having been injured before, was sober, industrious, of phlegmatic temperament. History of accident: Three years ago he fell from top of freight box-car, and in his descent struck the side of his forehead on the coupling step, landing across the track, fracturing two ribs. He was slightly stunned and dazed but walked with assistance to the ambulance. One hour after his injury I saw him and he complained, of course, of his fracture, but what concerned me most was the intense headache from which he said he was suffering. He had a severe contusion on his right frontal region, but there was no haematoma. Focal symptoms — rigidity, paralysis, etc., were absent. Choked discs negative and pupils responded to light. Raising his head made him dizzy and faint. I made a tentative diagnosis of concussion, for observation. He remained at home seven weeks. After convalescence his headache would recur on the slightest mental or physical exertion and his wife noticed a difference in his general disposition; his affection seemed changed, his memory poor, in fact, he became disinterested in everything. Against my orders he returned to work and it was then he noticed that walking on the top of cars or in attempting to get down he became very dizzy. He always felt as if he was going to fall. The company placed him in the passenger service and to encourage him promoted him to conductor on an easy run. Here he developed a new mental phase. The trifling vicissitudes of his daily life with the traveling public had him in hot water constantly. The smallest matter he would bring to the company's attention, while constant complaints came from the people who declared he used vile and abusive language, and from the traveling inspectors that half the passengers still held their tickets upon arrival at their destination. A glass or two of beer made him quarrelsome, sullen and stubborn. His associations became questionable and his moral character completely changed. One night he tried to kill his wife with a carving knife. He had been arrested a number of times. He is always mild-man-

nered, quiet and retiring, if left alone, but when crossed he loses his temper very easily. Two or three drinks turn him into a rowdy of the order of "Bill Sykes." This case exemplifies a functional cytoïd weakness produced by a concussion.

Concussion can and does very frequently exist alone, and is the response of the brain cells to injury, which injury is not severe enough to overcome the normal elasticity of the cranial bones or cerebral tissue. If, however, this injury is severe enough to cause a fracture with depression or a contusion and laceration, surely the mild plus the extreme force, which produces a fracture, will certainly carry with it as a result a concussion of some kind, involving the other cells which have not been directly affected by the trauma. Hence, in my mind concussion always exists with other injuries, whereas it may also be produced alone without any destructive or compressive cellular changes. This co-existence of concussion with other conditions produces at times a complexity of symptoms, making exact diagnosis in brain surgery difficult. If each and every case, however, is carefully examined and studied there will always be found a certain group of conditions indicative of more than simply a disturbance of molecular integrity. This brings us to a point which is very often overlooked, and I cannot refrain from calling attention to the fact that the alcoholic intoxication, either acute or chronic, very frequently and concomitantly exists with concussion of the brain, producing a train of symptoms similar to those manifested in a contusive, lacerative or compressive injury. It is, therefore, an important factor in all skull injuries exhibiting the slightest amount of restlessness, to carefully inquire into the patient's habits as to the addiction to alcohol.

The indications which always present themselves and form a fine differential line between contusion, laceration and concussion, are first and foremost restlessness, which appears and continues in severity, ranging from a slight degree of tossing the head from side to side, to a decided tonic convulsive seizure, rigidity or paralysis. These degrees depend entirely upon the extent of involvement and effect of the injury upon the higher motor neurons. This is brought about by a direct stimulation to the centres themselves, or their cells, due to a bruising or contusion of the part, an extravasation of blood from the cerebral vessels, or small punctate hemor-

rhages keeping up a continuous irritation of the areas which the injury has involved. Restlessness may also be caused by a laceration of the centres or cellate bodies, producing an inflammatory reaction, the resulting congestive irritation bringing about an over-activity of the other neurons.

Contusion and laceration not only stimulate these central neurons to over-activity, but in those which they most prominently involve; that is, those cells which have received the fullest force of the impact, they directly influence their reflex action. This condition will always be present in lacerative or contusive cases, and a close examination for its reflex peripheral result must be sought for in every head injury. Furthermore, the contused and lacerated condition of cerebral tissue produces a distinct localized inflammatory reaction, causing an elevation of temperature of a few degrees above the normal. In concussion or compression this temperature rarely, if ever, exists. Peripheral influences from contusions and laceration bring up an interesting point in differential diagnosis, as to the difference in onset of paralysis co-existing with laceration and contusion, and those paretic manifestations which follow a simple depressed fracture or organized blood clot over a centre, there will be a distinct and easily recognized paralysis with or without loss of consciousness. There will be no hyper-activity of the neurons involved, but a direct impairment of function from continuous pressure upon their circulation depriving them of their vitality.

Case No. IV. Boy of seventeen, tramp, stealing a ride on train. Was caught, jumped, and received a scalp wound over left parietal area. Admitted to hospital conscious, there was no shock. Head shaved showed a small scalp wound, posterior to fissure of Rolando, and patient suffering from motor aphasia. He was unable to speak and only uttered a few guttural sounds, but understood everything which was said to him. Was able to read and write, sight for words not being impaired. Charcot's description of the four sub-centres of speech, namely, visual centre for words, auditory centre for words, motor centre of articulate language and motor centre of written language, located in the third or inferior frontal convolutions, superior, temporal and Island of Reil pointed to a pressure over the articular centre of language, and, with this diagnosis made, I operated, removing a



depression about the size of a quarter, trimmed the bony edges. The boy's speech returned as soon as he came out of the anaesthetic state and he made an uneventful recovery. At the present time he is working steadily, living at home and has ceased being a nomad or hobo.

This extremely interesting case is very illustrative of the effect of compression when existing alone.

Case No. V. Young man, age twenty-four, thrown from train. Haematoma over right parietal region, extremely restless, alternating with a semi-stuporous condition. Patient seemed conscious. Focal signs absent, except slight twitching of hand. Tossed about, sitting up in bed one minute, the next throwing himself back on the pillow and lying with eyes half closed as if exhausted. Diagnosis, laceration, contusion and concussion with a tentative diagnosis of compression. Exploratory operation was refused. Next morning he had decided focal symptoms in the form of wrist drop and rigidity of left hand extending to wrist. Operation was refused, and, for religious reasons, patient was removed to another institution. Operation showed depressed fracture, laceration and contusion of brain caused by sharp spiculæ of bone. I did not follow the case any further, but I see no reason why he should not have recovered.

This case is illustrative of the result of compression with laceration, producing restlessness, twitching and with consciousness slightly affected from general concussion. In laceration without compression there will always be a manifestation of restlessness and the severity of this condition mensurates the extent of cerebral tissue injury. With this restlessness there usually exists more or less rigidity or paresis of torn parts focally involved. In skull depression or clot compression without laceration, there is a distinct, continuous and localized paralysis, only relieved and cured by removal of the plate of bone or other cause. Laceration and contusion may entirely ignore the cortical area of the brain, the injury extending its force to the deeper and inaccessible portions showing no apparent signs of any kind. If in these cases a careful examination is made, however, some localizing symptom may be found affecting one of the twelve cranial nerves or other higher senses, enabling you to start your diagnosis in the right direction. The difference between concussion on the

one hand and contusion or laceration on the other, is that in the former there is an *interference with the physiological functions of the cells*; structurally they are not impaired. In the latter *there is a direct destruction of the molecular integrity* either by laceration, extravasation of blood or bruising of the cellular tissue.

The effect of contusion and laceration is immediate and lasting; whereas in concussion slight and unimportant signs of mental disturbance may be the forerunner of serious psycho-motor activity. Contusions and lacerations, on the other hand, produce a constant irritation to the cells, leading to rigidity, paralysis or, subsequently, presenting epileptic manifestations of frequent recurrence.

In compression of the brain there are many important points to consider to assist in making a definite diagnosis. First and foremost is the vascular hypertension from acute cerebral pressure. This is caused by a direct stimulation to the vagus and vaso-motor centre from congestive conditions in the smaller capillaries and vessels, primarily produced from a direct anaemia locally caused by an interference with inertia law. The physical truth that no two particles of matter can occupy the same space at one and the same time is made more evident, because the limited space which the brain occupies prevents it from being stretched or carried beyond certain limitations. The resulting pressure upon the encephalon encounters cerebral resistance, the brain tissue being encroached upon becomes compressed and a local anaemia develops with venous stasis. This brings about a damming back of the circulation and a general increase of systemic blood pressure. Rise of blood pressure points to brain compression and is its first manifestation. Hourly records should be kept, and a gradual rise with a congestion of the optic circle also showing a fine tortuosity of the vessels (resulting in choked discs), point to intra-cranial tension. You will be safe in these cases to make a diagnosis of cerebral compression. The vaso-tonic centres, eventually becoming exhausted, will cause death, or, the mechanical pressure keeping up, the medulla may be forced against the foramen magnum causing a bulbar anaemia. This is the cause of all sudden deaths in fracture of the skull, especially of the base itself. A high blood pressure which suddenly begins to drop, means the development of vital centre paresis especially af-

fecting the respiratory centre. Fracture of the base of the skull, if the patients are alive after twenty-four hours, usually results in recovery, but invariably they leave an imprint upon one or more of the cranial nerves. A careful examination of these nerves is called for in each case. Here, as in the vault, it is not a question of skull fracture so much as it is of brain injury and, because there is hemorrhage from the ear, it is not certain that the skull is fractured or the brain injured. Similar to the way complications following vault injuries develop into psycho-motor, paretic or epileptic sequelæ, we have manifestations post-traumatic, in basal disturbance. But in these injuries the effect is more along lines of influencing the special sense than the mental or motor neurons. After a basal fracture there may develop facial paralysis, deafness, diplopia, and other special sense manifestations.

In making the diagnosis of basal fracture lumbar puncture is often overlooked. The simplicity of the operation certainly calls for it in doubtful cases. Blood cells in the cerebro-spinal fluid will soon verify the diagnosis.

In preparing this paper I have not attempted to cover special symptomatic lines in skull injury as we all know the manifestations which present themselves in these cases. I have, however, endeavored to bring out a few fine points of differentiation between the various conditions which brain injury will exhibit and in doing so have attempted to illustrate my theories by the presentation of cases occurring in my practice as a railroad and tunnel surgeon. That there is a marked symptomatic difference in all brain conditions we all know. That this difference can be elucidated and pointed out when they exist together, I firmly believe. Their elucidation and study in the individual makes brain diagnosis more easy. I have often proved this to my own satisfaction.

And so I close by saying that every skull injury, no matter how apparently slight, is serious until the brain has manifested that it has not been, either functionally or organically, disturbed. This condition settled controls all cephalic trauma.

A small meningocele may resemble a sebaceous cyst. The previous history is important in the diagnosis. A meningocele of this character is present "as long as the patient can remember" and remains about the same size; a cyst begins as a small nodule later on in life and increases in size.—*American Journal of Surgery.*

## AFFECTIONS OF THE EAR DUE TO ADENOIDS.\*

By Norton L. Wilson, M. D.,  
Elizabeth, N. J.

When our president asked me to contribute a short paper on affections of the ear due to adenoids, I readily acquiesced, because I thought I had some material at hand and it would take but little time. I have found, however, that much time was required in reading histories, and although I shall present some of my own work, I have freely consulted the literature, and am truly thankful to the authorities consulted, a list of which I have herewith appended.

To have a proper appreciation of the mechanism of secondary ear affections, where the primary trouble is in the upper air passages, one must bear in mind that the Eustachian tube ventilates the middle ear, and regulates the tension, by equalizing the differences that may arise between the atmospheric pressure on the tympanic membrane, in the external canal and in the post-nasal space, and the air pressure in the middle ear. Whenever the equilibrium is disturbed, auditory disturbances result.

The tube does not keep up a constant communication between the post-nasal space and the middle ear. In a state of rest its pharyngeal extremity remains closed. As the opening of the tube is effected by the tensor veli and levator veli muscles, the pharyngeal orifice must be opened whenever these muscles contract, which happens during the act of deglutition.

The opening of the Eustachian tube is, therefore, under the control of the will. If, however, the contraction of these muscles are interfered with or the adenoid tissue lies in the fossa of Rosenmüller in such a manner as to obstruct the orifice of the tube, it is not difficult to imagine how trouble may ensue in the middle ear. When adenoids are present slight causes are often sufficient to excite attacks of pharyngeal catarrh with extension to the tympanum.

The physician who neglects the child affected with adenoids, is in many instances, responsible for the development of a weak-

\*Read at the meeting of the Union County Medical Society, October 14, 1908.



ling, who as he grows into manhood, is seriously handicapped in the struggle for existence.

The removal of adenoids often prevents serious ear complications, improves the general health and beautifies the face.

Impaired hearing is frequently associated with adenoids. The two affections must often be considered together, but at the same time it must be remembered that they may be independent. The presence of adenoids not infrequently results in suppuration of the middle ear or in tubal obstruction and sclerotic changes, or more properly speaking, trophic changes, in the tympanic cavity. Whether the middle ear is suppurating or not, and the presence of pus greatly increases the responsibility of the physician, the impaired hearing warrants most careful consideration, as to allow a child to grow into manhood under such conditions, when the aural trouble can in the majority of cases be corrected, is most reprehensible.

Such conditions are progressive and the future of the child is often seriously marred by the physician not assuming the responsibility and pointing out to the parents the dangers.

When there is pus in the middle ear, the patient should receive unremitting attention, for as long as suppuration continues, not only is there danger of further impairment of hearing, but the gravity of endo-cranial complications is constantly augmented, with the duration of the purulent inflammation and the increasing age of the individual.

It is well known that the child can lose much more of his hearing without it being recognized than can the adult, and, therefore, in many instances it is only when his absent-mindedness or inattention becomes very pronounced, that attention is called to the aural changes.

For this reason it is the duty of the physician to give proper care to such children at an early period, for unless this is done the hearing may be so seriously impaired, the child is far advanced towards deafness before this condition is recognized.

The younger the child the greater the liability of both parent and physician to overlook the impaired hearing. The responsibility of the physician, in this respect, is not only limited to the child already affected with impaired hearing, but is even greater concerning the prevention of deafness. Adenoids are found in about

fifty per cent. of deaf mutes. I do not infer they are the cause of deaf mutism; rather attribute them as a result. They are frequently associated with a marked swelling of the Eustachian tube and a sero-mucous catarrh of the middle ear or perhaps a purulent inflammation of the tympanum which may extend to the mastoid.

In a paper read by Ballinger before the Section on Laryngology and Otology, of the American Medical Association, held in Chicago last June, he says: "The presence of adenoids is almost always attended by more or less infection and inflammation which extends by continuity of tissue and by direct infection to the Eustachian tube. Adenoids or their remnants are often present in adults, as any one who has made many examinations of this region can testify."

It is obvious, therefore, that these affections cannot be cured until the adenoids or their remnants are removed. I have not had the opportunity to look up all of my adenoid cases, but I present for your consideration 400 of my private cases whose histories I have read over, with the following results:

Of the 400 cases of adenoids 99 had ear trouble, that is, practically 25 per cent. Seventy-eight of these 99 cases had catarrhal inflammation of the middle ear, with more or less pain; 17 had purulent discharges from the middle ear; 1 had mastoiditis and 3 were deaf mutes. Sixty-two were males and 37 females. The average age was 9 years. The youngest was 13 months and the oldest 24 years.

Woakes, of London, thinks that in England 20 per cent. of the adenoid cases have aural diseases.

These figures are enough to show us that adenoids are an important factor in the production of diseases of the ear, and that it is the duty of the physician to be ever watchful for hypertrophied lymphoid tissue in the epipharynx.

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## ACUTE PERFORATING GASTRIC AND DUODENAL ULCER.\*

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(Continued from the December Number.)

A summary of the foregoing tabulated list, gives the following results in which at least one year has passed free from symptoms being only considered; one year or from one to two years, eight patients remained free from recurrence. For two years or from two to three years, eleven patients were free from recurrence. For three or from three to four years, eight patients were free from recurrence. For four or from four to five years, two patients; for five years or from five to six years two patients, and for six years, one patient was free from recurrence. It must be remembered, however, that, as is the case with malignant disease, no interval, no matter how long, can be considered as giving immunity against a possible relapse. In one of the writer's cases, two and one-half years had elapsed, and in several cases of a second perforation already referred to, almost a year elapsed in which the patient was free from symptoms before the recurrence took place. That on the other hand, so many patients are evidently completely cured by the closure of the perforation, that they remain in good health for such a long time afterward and taking into consideration, moreover, the fact that, gastro-enterostomy for either benign stenosis or ulcer is no guarantee against future perforation or fatal hemorrhage, the conclusion seems warranted that where an immediate gastro-enterostomy is not indicated by prior constriction of the pylorus or by constriction resulting from the necessary closure of the perforation, it is on the whole best to omit that operation until the future can decide whether the persistence of the gastric symptoms or their recurrence will render it necessary or not. Certainly the reports of published cases rarely, if ever, show that a fatal termination of the operation would have been averted if, to the closure of the perforation a gastro-enterostomy had been added. There can be no question that a subsequent gastro-enterostomy, if needed, can be more safely carried out after the subsidence of a general peritonitis than in the presence of such a serious complication as a gastric or duodenal perforation.

Before reaching any definite conclusion concerning the propriety of a gastro-enterostomy in this group of cases, it is essential to call attention to what is considered by some a much more advantageous procedure, namely a jejunostomy. This has been advocated particularly by Van Eiselberg on the ground that it increases the chances of recovery by providing for the satisfactory nourishment of the patient at a time

when it is most needed and when, for obvious reasons, the stomach must be at rest. Besides possessing the advantages of an immediate gastro-enterostomy, it is superior to that procedure in that it may be done more quickly and in that it insures with greater certainty a condition of gastric repose—a condition most conducive to the rapid healing of the sutured perforation. That the stomach is not in a condition of complete rest, however, after jejunostomy, has been well demonstrated by Brognitz (*Zentralblatt für Chirurgie*, 1906, p. 106), who, in a case of excision of a recurrent ulcer, in which a jejunostomy has been done, made the interesting observation that the introduction of food into the fistula was always associated with an abundant secretion of fluid into the stomach.

The following cases of jejunostomy in connection with the operative treatment of acute perforating ulcer have been collected by the writer:

Case 1.—Margliano (*Beitrag für Chirurgie*, Band 41), reports a case of acute perforating ulcer near the pylorus in a female thirty-two, of twelve hours' standing, in which a jejunostomy was done after closure of the perforation by suture, death occurring twelve hours after the completion of the operation.

Case 2.—Lemp (*Archives*, Band 76, I and II), reports a case of recovery in a patient forty-five years old, where general peritonitis had developed after an acute perforation, with recovery.

Case 3.—Krause (*Berliner Klinische Wochenschrift*, 1903, 47 and 48), reports a case of recovery in a patient thirty-two years old, in whom a jejunostomy was done twenty-four hours after the closure of an acute perforation with an omental flap.

Case 4.—Krause (*ibid.*, No. 47), reports a fatal case of jejunostomy in connection with the closure of an acute perforation, and also another interesting case where the patient recovered after a jejunostomy was added to a gastro-enterostomy for hemorrhage due to ulcer without perforation. He also refers to a successful jejunostomy by Bunge without mention of the place of publication and the condition for which it was done.

Case 5.—Loyal (*Beitrag Bruns* 51, 3), reports a case of an acute perforation of a gastric carcinoma treated by suture and jejunostomy, in which the patient died.

Case 6.—Turner (*Lancet*, 1898, II, 1761), reports a case of acute perforation of a gastric ulcer, in which eleven days after the closure of the perforation by suture, a secondary jejunostomy was done on account of intolerance of rectal feeding, with recovery. This case is of special interest in that the jejunostomy was not done until eleven days after the operation. At the present time it is not the general custom to postpone feeding by the mouth for that length of time.

Weber (*Berliner Klinische Wochenschrift*, 1903, S. II), reports the death of a patient from the establishment of a gastric fistula due to the giving way of the sutures by which the perforation was closed and states that, in future, he will always add a jejunostomy to prevent that accident.

Cases 7 to 13 inclusive—Van Eiselberg and his associates, Claremont and Rienzi, are enthusiastic advocates of this method of treatment. They report twelve cases of operation for perforated gastric ulcer (including four cases which were practically moribund at the time of opera-

\*Read by invitation before the New Jersey State Medical Association, Cape May, June 19th, 1908.



tion) with five recoveries. In these twelve cases jejunostomy was done seven times with four deaths in cases of perforation at twelve, sixteen, twenty-four and forty-eight hours' standing, respectively, in two of which (sixteen and forty-eight hours' standing) the patient's pulse was scarcely perceptible when the operation was undertaken. There were three recoveries in perforations of six, ten and twenty-four hours' standing, respectively. In the remaining five cases in which the perforation was closed with suture and without either jejunostomy or gastro-enterostomy, three died, the perforations being of two, five and eight hours' standing, respectively, and two recovered, the perforations being of three and of nine hours' standing, respectively.

Van Eiselsberg believes that even in the fatal cases, the added jejunostomy proved of value in that the patient, so treated, frequently showed signs of temporary improvement. In a personal communication six months ago, Paul Claremont stated that they were still of that opinion.

The writer has not been able to find either in the literature or by personal communication a single instance of jejunostomy in connection with acute perforated gastric or duodenal ulcer done either in France, England or the United States. Of those who have had any experience in this form of treatment, Van Eiselsberg's is the most extensive, but even his experience is too small to permit of drawing any conclusion of value.

In conclusion, it cannot be too strongly emphasized that the patients who recover are merely tided over an acute emergency, and that, irrespective of the type of operation, there is still urgent need of suitable medical and dietary treatment for the ulcer that remains just as if the perforation had never taken place. At the same time, the rapid subsidence of all symptoms in many cases together with the complete restoration of the patient's health would appear to indicate that, in some unknown way the perforation seems to exert a favorable influence upon the final healing of the ulcer.

Finally, that except where it is indicated by some form of constriction, a gastro-enterostomy on the part of the operation for perforation is best defined until indicated subsequently by either the persistence or recurrence of gastric symptoms.

#### History of writer's cases:

Case I. Abstract from Presbyterian Hospital Report for 1904.—M. C., female, 28. Admitted to the Presbyterian Hospital, 1903. Patient always has been a moderate tea drinker. Previous history negative until five months ago, since which time the appetite has been poor and the patient has been disinclined to eat solid food. There has been no pain or vomiting until one month ago. At that time a sharp shooting pain developed in the epigastrium, coming on suddenly, of several minutes' duration, without reference to the ingestion of food, radiating in every direction. These symptoms were not sufficient to confine the patient to bed nor was there any vomiting until the night before admission; then the pain suddenly became very intense, vomiting developed which was continuous. There was syncope and patient was advised to discontinue work. The vomitus consisted of partially digested food and afterward mucus. There was no hematemesis or blood in the stool.

*Examination on Admission*—Entire abdomen distended and very rigid; rigidity being most marked in the upper left quadrant. There was increased resistance over the left costal arch, the rigidity being most pronounced in its upper portion near the junction of the eighth and ninth costal cartilages. The abdomen was tender, especially at a point about three inches above the umbilicus and just to the left of the median line. There was tympanitis and loss of liver dullness. The patient lay in the dorsal position with the thighs flexed and any lateral movement of the trunk or extension of the thighs was very painful. Pulse varied from 105 to 120. Temperature about 101 degrees; the patient's general condition bordered on collapse.

*Operation*—Gas and ether anesthesia; median incision extending up from umbilicus a distance of three inches. The opening of the peritoneal cavity permitted the escape of a large amount of odorless gas. A small amount of serous fluid of neutral reaction was sponged away from the anterior wall of the stomach which presented in the wound free from adhesions. The depression of the anterior wall of the stomach from the parietal peritoneum in the direction of the pylorus was followed by the escape of an increased amount of fluid of neutral reaction. It was more turbid than that originally observed on opening the peritoneal cavity.

The pylorus was found to be free from perforation. Through a small opening in the gastrocolic omentum, the posterior surface of the stomach and the lesser peritoneal cavity were found to be normal. The stomach was now depressed toward the cardia and the escaping fluid became markedly increased in quantity as well as in turbidity and contained particles of partially digested food disclosing shortly the presence of a perforation on the anterior wall of the stomach about three inches from the cardia and midway between the greater and lesser curvatures. The fluid was of distinctly acid reaction. The perforation was about the size of a lead pencil and the edge of the orifice was well defined and soft. No induration could be detected in the adjacent stomach wall. A purse-string suture of chromic gut was taken in the healthy wall of the stomach and the orifice closed. Two Lembert sutures of silk were then inserted over the tightening purse-string suture, the peritoneal cavity carefully cleansed and after the insertion of drains down to the pylorus and point of perforation, the remaining position of the abdominal incision was closed.

*Post-operative Conditions*—Some nausea and vomiting for twenty-four hours. Pain greatly diminished and the patient felt very much more comfortable. The evacuation of free gas from the peritoneal cavity was directly followed by a disappearance of the distension and the lower half of the abdomen remained flaccid and free from rigidity throughout. Pulse ranged around 120, and was of very much better quality than prior to the operation. The temperature remained below 101 degrees. There was no gastric fistula at any time, and the patient received increasing quantities of fluid nourishment without pain or discomfort. During the second twenty-four hours the pulse had decreased to 80 and thereafter the progress was very satisfactory. Ten days after operation the patient developed the constitutional symptoms and the physical signs of consolidation of the left lower

lobe with a serous pleurisy, terminating in resolution at the end of the twelfth day. Thereafter uneventful convalescence.

**End Result**—Patient continued under observation for four and one-half years, during which period she was entirely free from any further gastric symptom. Since that time she has passed out of observation.

**Case II.**—Male, 39; admitted December 12, 1904. Referred by Dr. Vedder. In 1897 patient had an attack of abdominal pain with nausea, the pain being colicky and in the region of the appendix. In 1898 he had four more attacks of pain, this time in the left hypochondrium. In 1900 patient had an attack of pain in the epigastrium accompanied by a sense of heaviness, lasting from two to three days. He ascribed this attack to an indiscretion of diet. Eighteen months ago, he had a similar attack, and then remained in good health until three weeks ago. At that time patient had a sudden attack of epigastric pain radiating to both sides, intensified by pressure and relieved by lying on the back with the legs drawn up. This lasted a few hours and disappeared. Four days after this attack, following exposure on a drive, the pain recurred and was more severe than in the former attack, lasting four days, and was intermittent in character. Since then patient has had occasional attacks of pain, which, however, have not interfered with his business. To-day, just after lunch, patient experienced a sudden agonizing pain above the umbilicus and to the right of the mid line. He was obliged to lie down on the floor with his knees drawn up, showing marked symptoms of prostration with vomiting. He was brought to the hospital in a carriage, having walked a distance of several blocks beforehand.

**Examination**—Abdomen is normal in size and shape. The knees are drawn up. There is no area of dullness or shifting dullness in the flanks. The tenderness was general but most marked in the epigastrium and in the region of the appendix. Rigidity was present over the entire abdomen, but was most marked in the epigastrium and to a lesser degree in the lower right quadrant. The upper half of the abdomen was more rigid than the lower half. The left upper quadrant being the most rigid of all. The right costal arch was more rigid than the left. Peristaltic sounds were very frequent. The pulse was 78, the temperature 101 degrees, and the respiration 16. The patient had a hypodermic injection of morphin. The leucocytosis was 13,000.

**Operation**—Gas and ether anesthesia; median incision above the umbilicus. On opening the peritoneum, a slight puff of gas escaped, free from odor. The liver was retracted upward, exposing the pylorus to which the omentum was adherent by sero-fibrinous bands. On the anterior surface of the pylorus a small circular orifice was found about the size of a small French pea. This was closed by a silk purse-string suture reinforced by a Lembert suture. The vicinity of the perforation was washed with salt solution, and two cigarette drains were inserted to and beyond the site of perforation, the wound being closed throughout the remainder of its extent.

**Post-operative Condition**—Discharge from the wound was small in quantity and showed no evidence of suppuration. The patient vomited only three times in the first twenty-four hours

and thereafter not at all. The temperature was never higher than 101.2 degrees, and thereafter gradually diminished; pulse was never over 90. There was no distension. Five days after the operation a small amount of peptonized milk was allowed, the patient having been fed by rectum in the interval. Twelve days after the operation, while moving in bed, patient experienced a sharp pain in the left testicle and thigh, followed by the signs of phlebitis. This gradually subsided. Three weeks after operation, phlebitis developed in the right leg. Both attacks of phlebitis occurred without rise of temperature, but were associated with considerable discomfort and edema. The swelling gradually disappeared until at the time of discharge, there was slight swelling in the right knee only.

**End Result**—Three years and one-half after operation, the patient reports as follows: He is practically well with the exception of occasional attacks of "indigestion," occurring at irregular intervals and apparently excited by dietary indiscretion. These attacks are mild and consist only of a feeling of distress, eructations of gas, which are generally promptly relieved by a mild carminative. Once after taking a large dose of potassium bromid, the patient vomited, the vomitus containing a few streaks of blood. He has none of the constant pain of which he complained prior to operation. He is troubled still by slight swelling in the right leg when he stands continuously.

**Case III.**—Male, 50; admitted March, 1905. Patient was always strong and healthy. He takes one or two glasses of beer daily, seldom any whiskey. The appetite and digestion are poor and the bowels are irregular and constipated. Fifteen years ago, patient had a burning pain in the stomach with belching of gas without vomiting, the attack lasting two months. Since then patient has had similar attacks which gradually increased in severity during the past few years. For the past two years patient has had frequent attacks of burning pain in the epigastrium occurring several hours after eating, together with colicky pains over the entire abdomen, relieved by pressure, eating or belching of gas. There has never been hematemesis. For the past four days, there has been considerable pain and patient could eat but little. Eight hours before admission, and two and one-half hours after breakfast, which consisted of toast, beef tea and a boiled egg, patient was seized with severe pain in the mid-epigastric and right hypochondrium regions. This occurred suddenly, while patient was sitting in his office. Shortly afterward, the pain abated somewhat and he walked a distance of several blocks with two or three rests. On emerging from a subway train, he was obliged to come to the hospital in a carriage. There was no vomiting at any time, but only severe pain and prostration. Constipation was also present.

**Examination**—The entire abdomen is rigid, the rigidity being most marked in the upper right quadrant and to a less extent in the lower right quadrant. There was also rigidity in the upper part of the right costal arch. There was tenderness over the upper right quadrant. Percussion showed no change from normal and there were no signs of fluid. The leucocytosis was 18,000, the pulse was 108, the temperature 99.5 degrees.

**Immediate Operation**—Gas and ether anes-



thetia. The appendix was first exposed through an intermuscular incision, free yellow fluid emerging on opening the peritoneal cavity. The appendix was normal and the fluid was free from odor. The incision was then prolonged upward along the outer border of the right rectus muscle and a small circular perforation the size of a pea was found at the junction of the first and second parts of the duodenum on its anterior surface. This was closed with a purse-string suture of fine silk reinforced by two Lembert sutures and a flap of omentum was superimposed. The entire peritoneal cavity was irrigated with warm salt solution, and the pelvis, the left and right hypochondriac regions were thoroughly cleansed of the yellow odorless exudate which they contained. One long cigarette drain was inserted through the intermuscular incision into the pelvis and a shorter one to the site of perforation. Otherwise closure was complete. At the end of operation, the pulse was 112, decreasing shortly afterward to 96. The time of operation was an hour.

*Post-operative Condition*—There was slight reaction, there being no nausea or vomiting. Rectal feeding for four days. Water was given by mouth on the fourth day. The discharge from the wound was serous, small in quantity and free from odor. The bowels passed flatus on the second day and moved one day later by enema. The pulse never rose above 100, the temperature, never higher than 101 degrees, was normal on the fourth day; uneventful recovery. Culture from the yellow exudate showed no germ.

*End Result*—Three and one-third years after operation. There has been no return of any symptoms and the patient enjoys excellent health.

Case IV.—Male 28; admitted to the Gouverneur Hospital, June, 1905. For the past two years patient has drunk beer in excess. For the past four years he has suffered from pain in the epigastrium coupled with occasional nausea and vomiting, anorexia and eructations of gas. Such attacks were usually of about one week's duration and did not at first interfere with his work. They have latterly become more severe and frequent, occurring at present every two weeks and confining the patient to bed. The pain is referred to the entire abdomen with the maximum point in the median line. It is not markedly increased by a diet of corn beef and cabbage to which the patient has adhered nor does it seem to bear any relation to meals. The last attack before the present acute invasion occurred ten days ago. Four days before admission, while asleep, patient was seized with severe pain in the epigastrium. There were two attacks of vomiting with eructations of gas. Patient tried without avail to lessen the severity of the pain by movements from side to side, and by raising himself to a sitting posture. Shortly after, the pain became general over the abdomen, but more dull in character and then ceased. Tenderness referred to the epigastrium, persisted for two days after the pain had ceased. During this time there were occasional sharp, stabbing pain in the epigastrium which sometimes awakened him at night. At time of admission, the bowels had moved after saline catharsis and the patient remained in bed only by the advice of his physician, the pulse being 100, the temperature slightly elevated, and pain and nausea,

although diminished, still persisting. There was no distension. There was slight general rigidity, most marked in the lower right quadrant. Tenderness is most marked over McBurney's point. There is also some tenderness just above and to the outer side of the umbilicus.

*Operation*—Under gas and ether anesthesia, the peritoneal cavity was opened by the intermuscular incision and the appendix was found congested, but without any special sign of inflammation. A moderate amount of gas escaped through the incision and with it a considerable quantity of yellow turbid fluid free from odor welled up from between the coil of small intestine in the pelvis. An incision was then made in the mid-line above the umbilicus and from its upper extremity; a second incision was made along the costal margin and the duodenum and pylorus rapidly exposed. Here the yellow fluid, above mentioned, was more abundant and a perforation was quickly found in the anterior wall of the first part of the duodenum circular in shape, in a center of induration. This was closed by a purse-string suture, reinforced by two Lembert sutures, and after general irrigation of the peritoneal cavity, the incisions were closed, two cigarette drains being left, one to the site of perforation, the other through the intermuscular incision to the bottom of the pelvis. The patient made an uneventful recovery.

*After History*—The patient remained in the best of health for two years and a half. Last March, he suffered a recurrence of the pain. During April and May he was entirely well. Latterly there has been another attack of pain which has interfered with the patient's work and which is said to have been of the same type and of equal severity with the pain that existed prior to the operation. He is being kept at present under observation in view of a possible gastro-enterostomy.

Case V.—Male, 46, driver, admitted to the Gouverneur Hospital June, 1906. For past four months patient, who has always indulged freely in beer and whiskey, has complained of severe epigastric pain coming on about ten minutes after eating, which was occasionally relieved by vomiting. On the morning of admission, patient, while driving a truck, was seized without warning with severe excruciating pain in the upper right quadrant of the abdomen. It felt as if something had given way and was so severe that he immediately walked to the hospital to obtain relief. The patient on admission referred the pain to the end of the ensiform cartilage and to the left of the spine and lumbar region. On examination the respiration was superficial, increased in frequency and thoracic. There was no distension. The upper part of the abdominal wall was retracted. On palpation, there was general abdominal rigidity, most marked in the upper right quadrant, and at this point the patient complained of the greatest tenderness. There was no change on percussion and the bowels moved to enema. The pulse was but slightly increased in frequency and of good volume. The temperature was 100 degrees.

Immediate operation under gas and ether anesthesia. A three-inch median incision was made above the umbilicus. The peritoneal cavity contained yellow exudate; and deep down on retraction of the right lobe of the liver, a perforation was found on the anterior wall of the

stomach about two inches from the pylorus and near the lesser curvature. The perforation, of irregular shape, was closed by a purse-string suture. Two cigarette drains were introduced to the site of perforation and beyond it into the subphrenic space.

The patient made an uneventful recovery without the formation of a gastric fistula.

*End Result*—Two years after the operation the patient was in excellent health.

(To be continued.)

## SOME REMARKS ON CORONERS AND THEIR DUTIES.\*

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I appreciate the fact that the subject of which this paper treats is of little interest to the profession in general, and that it only appeals to those of you who hold the position of coroner in your respective counties or corporations. Yet, I believe the efficiency of this office can be greatly enhanced by a clearer and more definite understanding on the part of the physicians of the powers and duties pertaining to it. For it is upon the physician that the coroner relies for a notification of many cases which come within his province to inquire into, and in which an early investigation is essential for an intelligent and correct conclusion.

As regards coroners' duties, I wish only to speak of what constitute his cases, i. e., what cases should be referred to him for investigation. This function is not clearly expressed in our statute books. The wording in the Code of this State is so ambiguous that the coroner, contenting himself with the knowledge obtained from that source, finds himself frequently in doubt as to whether certain cases coming under his notice should be investigated by him or not.

With a view to a better understanding of the functions of this office, and thus adding to its usefulness as a means for the prevention as well as detection of crime, I have made a careful research into the history and literature relating to the subject, and have embodied in this paper the results of the information thus obtained.

The duties of a coroner can be expressed in a general way as consisting principally of investigating all deaths of persons, whether sudden or otherwise, whose manner of taking off creates suspicion that the death might have resulted from foul or other unlawful means.

According to the *American Law Register*, the proper cases for the coroner's office are sudden deaths, violent and unnatural deaths. These are from their nature suspicious, and an inquiry into the circumstances of all such cases should be made by the coroner, although an in-

quest need not necessarily be held. There is no necessity for a coroner to hold an inquest in any case that he investigates, unless this preliminary investigation reveals facts concerning the death sufficient to create in his mind a reasonable belief that it resulted from some unlawful means.

The decision of the question as to whether an inquest should be held or not is left entirely to the discretion of the coroner; and if there is nothing material to be gained by it, the coroner is not justified in putting his county or corporation to the additional expense of inquest.

As regards sudden deaths, I think it is reasonable to assume that any death occurring within twelve hours from the time the deceased was in his usual health, should be considered sudden. It is certainly unexpected, and, consequently, suspicious, and the responsibility on the coroner to make inquiry into it is in no way lessened by the fact that there was a physician present just before or after the death of the person. That the attending physician is equally as capable of determining the cause of the death as the coroner is not questioned. It would be presumptuous to claim for the latter any superior knowledge in that respect over the physician, but the coroner is the proper legal authority to decide these cases; the physician is not.

The law assumes that the physician in attendance on a person dying under suspicious circumstances, may himself, in some way, be *particeps criminis* until an inquiry by the coroner exonerates him. The impropriety of the attending physician issuing the certificate of death in these cases is evidenced by an act of parliament relating to inquests, which states in part, that "if any person state on oath that in his or her belief the death of the deceased was caused partly or entirely by the improper or negligent treatment of any medical practitioner, he shall not be allowed to participate in the autopsy on the deceased, etc."

As regards violent deaths, such as murders, suicides, drownings, burnings, etc., these are all recognized as coroners' cases, and need no comment. Regarding deaths from casualties, Dr. Lee, of Philadelphia, an eminent authority on coroners' laws, says, "Doubtless, in some instances, when the facts of the case are well known beforehand (and under this heading, we include the many deaths occurring without medical attention, from natural causes which the coroner is usually bound to investigate), an inquest is unnecessary. But as such, we cannot consider the large number of deaths occurring from casualties which it is also the coroner's duty to inquire into, in many cases it being absolutely necessary that there should be such an inquiry instituted as soon as possible after the death of the party, and when a death has been the result of the negligence, either real or apparent, of any firm, company or corporation, the interest of the victim's family, or of his employers seem to render such an investigation an imperative necessity."

In the case of *Lancaster County vs. Dern Long, J. C. P.*, the court held "That when death occurs from any violence done to a person by another, although such violence may not immediately kill the party injured, it is still the duty of the coroner to hold an inquest." This opinion having been taken to the Supreme

\*Read before the thirty-ninth annual meeting of the Medical Society of Virginia, October 20-23, 1908. Taken from the *Virginia Medical Semi-Monthly*.



Court upon a writ of error, that tribunal approved it. From this, it would seem that the coroner should investigate all cases of accidental injuries, even when the deceased has not died immediately, but lived several days, and then died from some complication brought on by the injury. For the importance of an investigation is as great then as it would have been had the deceased been killed outright.

Under the head of unnatural deaths, I would include those persons who, in their last illness, were unattended by a physician, or in which the physician has not seen the deceased within two weeks prior to the latter's death. Still-births and abortions of unmarried women, and deaths of infants of unmarried women, occurring within a few days after their birth, are pre-eminently coroners' cases, for in these there is a strong suspicion of crime. It is natural to suspect the woman or some interested party guilty of destroying offspring born out of wedlock. A coroner has a right to and should insist that all such cases be brought to his notice, and not leave it to the discretionary judgment of the physician who may have been in attendance as to whether he should be notified. Deaths occurring in prisons are also coroners' cases, for it may be presumed that the prisoner possibly died as a result of ill usage on the part of the jailer.

Summing up: the following deaths may be said to be properly in keeping with the law for the coroner to investigate; and in which to hold inquests, if, in his discretion, he sees fit:

*All sudden deaths*, whether violent or otherwise. *All violent deaths*, whether deaths occur immediately, or the deceased has survived for some days. *All suspicious or unnatural deaths* from whatever cause, such as poisonings, drownings, murders, suicides, burnings, still-births of unmarried women, and deaths of infants of unmarried women occurring within a few days after their birth. *Deaths where there has been no attending physician. Deaths in prison.*

In conclusion, I wish to make a few remarks concerning the coroner himself—the requisite qualities he should possess in order to administer in a proper manner the functions of his highly important office. *The American Law Review* says on this subject: "The grave and important powers lodged in the hands of a coroner, combining in his person the function of a medical expert and a judge, is sufficient warrant for a careful selection for the filling of such an office." A coroner should be a person of high standing in the community. He should be a competent physician who, by an intelligent examination would, in most cases, be able to decide that the death was natural, and no further examination needful. His knowledge should embrace both the legal and the medical aspects of his office. In order to do justice to his position, he should be well informed on such branches of medicine as are necessary for the conduction of a thorough and scientific legal examination and autopsy. A good knowledge of anatomy, physiology and pathology is essential.

The average medical man has no special fitness for the conduction of a medico-legal examination. He who in the sick room may be a skillful diagnostician or brilliant operator is, unless he has had previous experience, very likely to make a dismal failure when called upon to perform an autopsy. Finally, for the reason

that forensic medicine is best learned by experience, the coroner should be selected with a view to his fitness for the office; and his appointment should be permanent in order that the public may have the benefit of the experience of a long tenure of office.

## Abstracts from Medical Journals

### CIGARETTE SMOKING BY THE YOUNG.

(From *American Health*, Sept., 1908.)

By Dr. A. A. Woodhull, late Colonel Medical Department, U. S. A.—In *American Health*, September, 1908. Dr. Woodhull holds that cigarette smoking by the young is harmful to them. The nicotine, which by heat is changed into pyridin, an equally active poison, acts on the motor nerves, abolishing their conductivity, then that of the motor paths in the spinal cord, disturbing the ability to do delicate mechanical work. It is well known that those who train for athletics forego the use of tobacco, at any rate for the time. Tobacco also acts on the vaso-motor nerves causing contraction of the caliber of the capillaries, and persistent use of it restrains development. In cigarette smoking the smoke is inhaled, and to some extent is taken up by the lungs, and thus reaches and acts on the capillaries. In lads and growing youths tobacco arrests the natural elimination of waste and hinders the utilization of fresh material. This explains the fact as observed that the stature of youths who use it is less than that of those who do not use it. There is also the tobacco heart, an irritable heart, often accompanied by intermittent pulse; also a predisposition to neuralgia, indigestion and functional disturbances of vision. There is also developed a greater tendency to acquire an appetite for alcoholic liquors. Premature puberty is induced, increasing the sexual propensity and leading to improper sexual practices. There is a consensus among educators that the use of tobacco dulls the memory and intellect. When a promising pupil in a public school begins to decline in his work it is almost certainly found that he has begun to use cigarettes.

### ALCOHOL IN RELATION TO MEDICINE.

In the *Scottish Medical and Surgical Journal* for December, 1907, Finlay tells us that looking at the question from a personal side, he has, as the years pass, come to use alcohol less and less in the treatment of disease. Pneumonia and enteric fever are among the acute diseases most often met with, in which for limited periods alcohol in small quantity may often be usefully employed; but he has rarely prescribed it in the case of youthful patients, and has generally abstained from ordering it even for adults approaching the middle period of life. He has for long taught that the routine use of alcohol in diseases is bad even in acute cases, and that in most chronic cases it is wasted or worse, except when prescribed for some temporary condition, such as sudden heart failure in cardiac disease. The following propositions and recommendations sum up his advice to his readers in dealing with the matter:

1. Regard alcohol as a drug, a very valuable and dangerous one, and put it in the same category as morphine, strychnine, atrophine, and the like. If you look upon it as a drug you will probably not go very far wrong.

2. Prescribe it with a due sense of responsibility and not after a routine method, having regard to each case on its own merits, and considering such points as the state of the pulse especially, the age, previous health and habits, and the severity and period of the attack.

3. Young patients of good constitution are better without it, except in presence of heart failure or crisis of some kind.

4. Use the smallest doses possible, and give injunctions as to time and mode of administration. Watch its effects carefully, and omit it when the critical condition has passed.

5. Be especially sparing in chronic diseases, where in most cases it does not the slightest good, but only leads to waste.

In conclusion the author states that he is well aware that what he has advanced will not commend itself to many medical men, both of what may be termed the alcoholic and the non-alcoholic school, whose views, conscientiously held, are entitled to respect; but this he cannot help. He has endeavored to put before his readers the views which he has been led to think correct, not arrived at as a result of physiological study or of observation of the effects of alcohol on the healthy individual, or on the tissues or conduct of the lower animals; but as the result of observation and practical experience in the treatment of disease, aided by a reasonable consideration of the opinions expressed by many observers, and of the evidence upon which these opinions are founded. For obvious reasons the general question of the consumption of alcohol has not entered into his present purpose, but he adds that he believes its daily dietetic use, except in such persons as are weakly, is harmful, and in the young especially so. In them it is bad physically, morally and intellectually, and his advice would be to have nothing to do with it. That it may be at least not injurious in the case of many who are beyond the meridian of life, taken in wise moderation, the author is not prepared to deny; and in the case of the aged he believes it to be often decidedly beneficial. The great difficulty here is as regards "moderation," and those who cannot assure themselves, or be assured by competent advice upon the point, had better let it alone.—*The Therapeutic Gazette*.

#### GYNECOLOGY AT VIENNA.

(Addresses by Drs. F. Schauta and A. v. Rosthorn at the dedication of new Gynecologic clinics at Vienna.)

Schauta's address is accompanied by an interesting chart showing the mortality of the Maternity for the hundred years ending 1884. The curve shows the increasing mortality with the increasing anatomic tendency of medicine in the eighteenth century, especially when the material was used for teaching purposes. Then came Semmelweis, and the curve drops from its highest point nearly to its lowest; then the level drops lower still with Lister, and reaches its minimum with the construction of a new build-

ing in 1873. Rosthorn devoted most of his address to the clinical consideration of pain as a symptom. The parts of the sexual system covered with peritoneum are devoid of sensibility to pressure, warmth, cold and pain, and are refractory to stimuli, chemical, thermic and electric—all this justifying the conclusion that in these parts it is innervated by the sympathetic alone. The uterus can frequently be extirpated without any anesthetic, with scarcely the slightest pain. Only considerable traction on the ligaments and severing the masses of connective tissue around the cervix, above the roof of the vagina, induce pain. The ovaries and tubes also can be cut and cauterized without the patient feeling pain. She notices the manipulations only when the pedicle of the ovary is pulled or ligated. Plastic operations on the vagina do not require even local anesthesia, if the orifice and the perineum are not involved. The sacral pain accompanying most gynecologic affections is undoubtedly a radiated pain, possibly explainable by Head's projection, but it occurs also in neurasthenics and hysterical patients free from gynecologic changes. It may also accompany displacement. It is important, he added, to classify the pain, and sometimes several days' observation are required for this, to study the factors which elicit the pain, intensify or attenuate it. Pain, he declares, confronts us in many forms like an all-conquering demon, and yet it is the friend of the sufferer, the watchdog of health. It compels the sufferer to seek help, and is thus the physician's most loyal ally.—*A. M. A. Journal*.

#### THE EVILS IN THE PRODUCTION OF MEDICINAL PREPARATIONS.

(From *Deutsche Medizinische Wochenschrift*, Berlin.)

In this comprehensive article Professor Harnack describes the ways in which certain manufacturing chemists seek to foist "new" medicinal preparations on the market and blind the eyes of physicians to the fact that the "new" remedies are merely mixtures of old and long-tried drugs with whose action every one is familiar. In order to conceal this, he says, the manufacturers add to the formula some unessential ingredient, which they know none of the drug firms carries in stock, or they claim some new synthetic ester as the source of the peculiar efficacy of the new preparation. None but an expert chemist is able to see through this veil of mystery that the "new" remedy is merely a mixture of familiar drugs and that its therapeutic action is proportional to that of its ingredients. He cites pyrenol as a typical example of these "evil outgrowths" on the noble tree of legitimate production of medicinal preparations. Pyrenol is claimed to be a "thymol ester of benzoic acid" of mysterious efficacy against neuralgia, etc., but verified analyses show that it is a mixture of nearly equal parts of sodium salicylate and benzoate plus 0.3 per cent. thymol and 1 per cent. free benzoic acid. The efficacy of the salicylates, he exclaims, in their proper field does not need to be demonstrated anew at this late date! He cites also another recently launched preparation, eglatol, which claims to be "chloral freed from toxic properties." Two highly laudatory articles on it by prominent



men have already appeared, in the *Deutsche Aerzte Zeitung* and *Medizinische Klinik*. This has since been proved to be a mere mixture of chloral, antipyrin, caffeine and urethan—a mixture of a hypnotic, a stimulant and an anæsthetic! Harnack has noticed that the first impressions of a new remedy are generally inclined to be favorable. If physicians would wait for maturer judgment before publishing their reports, he says, they might be less "favorable," while the "new" remedies would not gain such a vogue so early. In conclusion he remarks that no one likes to attack a hornets' nest, but if he starts the task he must go energetically to work. The private scientist who publishes his analyses of these preparations makes enemies and is liable to be sued for damages, which is about all the harvest of gratitude he reaps for his tedious work. Harnack would like to have the protection of a trademark name restricted to those preparations which are proved to be made by a patentable process. (An editorial in the same issue of the *Wochenschrift* states that Harnack, professor of pharmacology at Halle, was asked to write up this subject, the "Evils in the Production of Medicinal Preparations," as he is considered one of the most competent experts in pharmacology, etc., in the country. The hope is expressed that his lucid and impressive article will arouse the authorities to the necessity for some central official institution for chemical and toxicologic analyses of the new remedies offered. Also that the article will make an impression on physicians, as, the editorial adds, "the almost unappeasable craving of not a few colleagues to try these new remedies without careful scrutiny of the literature sent them by the manufacturer, and the lamentable blunder of so many of them in praising in medical journals the new remedies without adequate critical judgment, are important aids in the promotion of the fake medicinal-preparation business.")—*Abst. in A. M. A. Journal*.

### THE CHILD AFTER THE AGE OF TWO.

Dr. A. B. Marfan in *Annals de Medicine et Chirurgie*, Paris, says: "The phase of childhood between the ages of 2 and 7 is characterised by the fact that milk is no longer the most important food, and that certain parts of the nervous system are developing actively, especially those which preside over the motor functions and the intelligence. The will power does not become strong until later. This is the age for tracheo-bronchial glandular trouble, tuberculous meningitis, adenoid vegetations and the acute contagious diseases. After the age of 2, the immunity transmitted by heredity disappears and the child is less isolated. Children at this age are not more susceptible to contagions, but conditions favor them. The resisting powers are constantly growing stronger and the children generally recover completely from their acute infections. After the age of 7 there is a phase of slow growth until about 12, when there is a sudden and rapid growth up to puberty, but this growth is not harmonious. The trunk is relatively short and the thorax narrow, the heart small and the breathing capacity weak, in proportion to the height. In this period the natural conditions are identical with those which we regard as the 'tuberculous constitution.' It seems that the so-

called 'candidates for tuberculosis' retain into later life the corporeal proportions of the antepuberty period, and do not grow into normal adult proportions. Marfan asks: Is this arrest in the development a predisposing cause for tuberculosis, or is it not rather already the effect of latent tuberculosis? The diseases most common at the age of puberty are typhoid fever and acute articular rheumatism, with heart complications, and possibly chorea. Tuberculosis at this age is remarkable for the frequency of the torpid forms and of galloping phthisis, and the localizations in the peritoneum and lower extremities. The thymus has completed its involution and the tonsils commence theirs. Marfan adds that between 6 and 12 the mortality is the lowest for children. The child has paid his tribute to the acute infections, while the growth is slow and harmonious. During the antepuberty phase the child requires special hygiene and restraint from excessive exercise and fatigue. Attention should be paid to strengthening the will power during this period, and Marfan adds that the home surroundings are generally better for this age than most boarding schools. In conclusion, he discusses the question whether pediatrics should be made a specialty, saying that a physician who practices among children must know, to start with, all that a physician has to know who practices only among adults, and besides this, he has to study the childish organism throughout, its unfinished development and energy of growth inducing special characteristic reactions."

### PREVENTION OF UNNECESSARY NOISE.

(From the *Washington Medical Annals*,  
Nov., 1908.)

Imogen B. Oakley, in *The Outlook*, October 17, 1908, page 351.—The writer has inquired into the regulations of a number of governments in regard to the prevention of noises. The entire article is well worth reading. She is a member of the Civic Club of Philadelphia on "Unnecessary Noise." She found by actual observation that in her own neighborhood (her residence is on a quiet residential street) there was some preventable noise every five minutes on an average between 4 A. M. and midnight. The working men and working women were, however, the persons who made the most complaint about unnecessary noises, because these interfere with sleep.

New York City has taken up the matter in earnest. That city secured a national law regulating steam whistles on the waterways, and has made regulations regarding noises in the city itself. As an instance it may be mentioned that 1,568 flat carwheels were condemned and ordered removed in one month. St. Louis has more stringent laws against noises than any other city in the country; bells and steam whistles and street music are forbidden, and street vendors are forbidden to cry their wares. It is said that in Chicago a rubber horseshoe is being used. In Milwaukee also street musicians are not permitted on the streets. Buffalo forbids bells and horns as a means of advertisement; locomotives are not permitted to whistle except for necessary signals. Detroit forbids whistling from stationary engines, and limits the whistling of steamers and locomotives to the prescribed code of signals. San Francisco

forbids the sale of fireworks to be used in the city. Cleveland forbids the sale or possession of toy pistols and combustible fireworks. Baltimore forbids all kinds and grades of steam whistles between 6 P. M. and 7 A. M., and fines persons who permit dogs to bark too audibly either day or night. Massachusetts has a State law regulating the blowing of whistles and ringing of bells. Boston also regulates steam whistling, the cries of venders, and street music. Media, Pa., condemns worn-out, rattling, flat-wheeled cars. Montclair, N. J., has a law against the barking of dogs. Norristown, Pa., has a law against street venders noising their wares. Reading, Pa., requires cats and dogs to be licensed.

Abroad also steps have been taken against unnecessary noise. Berlin limits the number of hours that one may practice on a musical instrument in an apartment house; hand organs are forbidden altogether. The Berlin elevated trains are practically noiseless. The Prussian small towns allow street music one day in the week and require the instruments to be tested on the appointed day by a special officer. Vienna prohibits hand organs on the street. In Italy no one is permitted to grind a hand organ or street piano publicly unless unable to support himself in any other way. It is said that at one time Verdi, the great composer, was so madened by the incessant grind of wheezy instruments that he rented for one month every hand organ in Milan, and so had a respite for the month. Paris has banished street music. Bilbao, Spain, forbids the ringing of bells. In some parts of London church bells are not permitted to ring between 9 P. M. and 9 A. M. Newsboys on the great London streets are forbidden to shout the names of the papers. Street music and calling wares for sale is also forbidden for the principal streets.

#### ANCIENT FRENCH OPHTHALMOLOGY.

(From *Interstate Medical Journal*, Dec., 1908.)

In the new edition of his Bordeaux thesis, Dr. A. Chabe has added a chapter to the history of French ophthalmology by describing, in an erudite manner, the evolution of Bordeaux ophthalmology, from its earliest empirical beginnings in the Christian era until the present time—a period that has many savants who do honor to the specialty. Aside from its literary and scientific value, its anecdotes are not only curious but of remarkable interest to the antiquarian. One of the first oculists of Bordeaux was Marcellin, the Empiric, who was born at Bazas and lived in the middle of the fourth century. He was the author of a book entitled, "*Liber de medicamentis*," published at Basle in 1336, which shows that he was deserving of his surname. Here are some of his choice pearls of wisdom: 1st—To evade, throughout the year, ocular pains, when cherries are luscious and most tempting to eat, crush three cherry stones, spread them on a piece of linen to make an amulet, but before wearing the amulet turn towards the Orient and make a vow not to eat cherries during the year. 2d—Hold a fly with the left hand and whilst holding it mention the name of the invalid and say you are holding the fly to cure his eyes. Then place it between the folds of a piece of linen; suspend the same from the neck

of the invalid and do not forget to look straight ahead, and not behind, while placing this amulet. 3d—Do you wish to cure at once a person affected with pain in the eyes? Place around his neck a piece of linen having as many knots as there are letters in his name. Remember to pronounce each letter of his name while making the knots. 4th—One who has eaten a morsel of boiled stork cannot have a blepharitis during many consecutive years. 5th—In case you see a shooting star, count rapidly until the star disappears. The number reached before its disappearance will indicate the number of years that shall elapse before you have a blepharitis. 6th—For foreign bodies in the eyes, produce a slight friction by gently passing the thumb and medical finger (the ring finger) three times over the open eye, saying each time a pass is made: "I embrace the head of Medusa." 7th—If there is a sty on the right eye hold (?) it by means of three fingers of the left hand, and standing in the open air, with looks turned towards the Orient, say: "Since stone is hard and dry and not covered with fleecy wool, so shall this sty remain hard and dry and finally dry up altogether."

#### HEMORRHAGE FROM THE STOMACH AND DUODENUM.

W. J. Mayo (*Surgery, Gynecology and Obstetrics*, May, 1908) notes that a single hemorrhage from a patient who has not had previous gastric symptoms is probably not due to ulcer, and holds that bleeding from the stomach is neither a sure sign of ulceration, nor is its absence a contraindicating one. Indeed, he holds that hemorrhage from ulcer is by no means of frequent occurrence. Copious hemorrhage at infrequent intervals is the history of a considerable percentage of ulcers, whilst continuous small hemorrhages are the rule in cancer; 96 per cent. of gastric and duodenal hemorrhages cease spontaneously. Fatal hemorrhages usually incident to involvement of the splenic vessels produce death so quickly that an operation cannot be performed. Bleeding ulcers divide into three groups: First, the acute round peptic ulcer, which Mayo states in his observation was not round but rather a small fissure, the detection of which was difficult. The second variety is a mucous erosion. These two forms are both probably toxic in their origin, are both rare, and are usually medical affections. The third variety—i. e., the chronic ulcer—constitutes a surgical affection, though not necessarily operative during the acute stage. Mayo states that more than 90 per cent. of acute hemorrhages from the stomach are from chronic ulcers with a well-marked ulcer history. In the greater number the condition would have warranted operation independent of the hemorrhage. When there is hemorrhage from the stomach without previous history of ulcer, the burden of proof must show why an operation should be performed; while in hemorrhage from chronic ulcer the burden of proof must show why an operation should not be performed.

In case of small hemorrhages gastrojejunostomy is an efficient curative agent. When the ulcer is some distance above the pylorus, permitting of ready egress of stomach contents by the normal outlet, gastrojejunostomy is of less



value. In connection with gastrojejunostomy, if the ulcer exists in the stomach it should be excised if possible. Where this is not feasible the main blood-vessels leading into it should be ligated and the peritoneum and muscular coats drawn over it. Bleeding ulcers which lie a considerable distance above the pylorus should be excised. Should the deformity incident to the removal of the ulcer and its plastic closure materially interfere with drainage from the pylorus, gastrojejunostomy is indicated in addition to excising. In hemorrhage from duodenal ulcer, ligation of the blood-vessels and closure of the outer coats over the indurated area, with gastrojejunostomy, will be found efficient.

In the majority of ulcers, both of the stomach and duodenum, the blood-vessels leading into them are varicose. In severe hemorrhage from the stomach in which no ulcer can be located on the exterior, the anterior wall of the stomach is opened by a longitudinal incision, and by counter-pressure over successive areas the mucous membrane is caused to present itself at the opening until the bleeding point is detected. With chromic catgut on a small curved needle the hemorrhagic area is sutured from the mucous side. Over this, from the peritoneal side, a few linen sutures are introduced for protection.

### THE TREATMENT OF GASTRIC ULCER.

In the *St. Paul Medical Journal* for June, 1908, Greene sums up an article upon this topic as follows:

1. Medical and surgical statistics are alike faulty and misleading.
2. A deplorable amount of operative work has been done in purely medical cases.
3. In most instances neither before nor after operative interference has there been a proper scientific use of modern diagnosis or therapeutic procedures.
4. Simple ulcer is always medical. Chronic ulcer is only surgical when persistently recurrent. Cases of moderate stasis and pylorospasm are not primarily surgical. Hemorrhage cases are seldom fatal and yield a lower mortality under medical than under surgical treatment. Surgical relief is advisable in painful perigastric adhesions which are resistant to medical measures. Perforation is a purely surgical condition.
5. Proper medical treatment and after-control reduces recurrence to a minimum.
6. The absence of this control in public clinics permits and justifies a freer recourse to surgery than would be permissible in private practice.
7. In properly controlled private cases there is but a negative mortality.
8. The rigid plans of treatment and time divisions are an absurdity, and the practitioner should be governed by a knowledge of the fundamental principles involved, the clinical course, known conditions as to gastric secretion, and yet more as to mortality and the individuality of the patient.
9. Absolute rest, mental and physical, the wise employment of alkalies, proper nourishment, demanding little of motility and secretion, exciting a potent digestive fluid rather than a profuse one, easily assimilable and nutritious, and proper psychotherapeutic control comprise all measures usually found necessary.

10. Hospital care and the services of a trained nurse are of great importance.

11. Patients should be kept under direct observation and control for at least one year after apparent cure.

12. Results should be reported after five years.

13. Cure is not complete until all local tenderness, rigidity, and pain are relieved, blood absent from the stools, and the previous best weight of the patient regained. The requirements on the part of the surgeon should be quite as definite, and in both the claim to cure should be tested by a long immunity period.

### TREATMENT OF HEMATEMESIS.

Sir Dyce Duckworth in the *Clinical Journal* of June 24, 1908, has this to say in regard to the treatment of hematemesis: In cases of gastric ulcer absolute rest is to be enjoined. The alarm and unrest of the patient are to be allayed. Rest in bed on a hard mattress (with the head low and the feet kept warm), with perfect quietude, is to be secured. Such bleedings are hardly important save as confirmatory evidence of any previously entertained suspicions as to the nature of the case. Large bleedings tend to cease in most instances, and rarely prove fatal in the case of acute depressed ulcers. The patient may promptly show signs of grave anemia. Sometimes the effused blood is not ejected by the mouth, and passes by the bowel. Remember that bleeding is rarely the first recognizable symptom of a gastric ulcer.

The great point in practice here is to put nothing in the stomach for at least four or six hours. Any craving for cold drinks must be firmly resisted as tending to encourage more bleeding and vomiting. The first and best liquid to administer is whey, or more suitably, albumen, in half-ounce doses (prepared by adding a drachm of powdered alum to a pint of milk, nearly boiling, and straining through muslin). Later, albumen, beaten up with water and a little glucose (the eau albumineuse of the French Codex), may be given in small amounts, not too frequently. Afterward, milk with one-third of lime-water, or with the addition of liq. calcis saccharatus, B. P., ten minims to the ounce. Lactate of calcium, five grains to the ounce, may also be used. Cream and water is of service also a day or two later. The rectum may be washed out the day after the hemorrhage with a small enema, and subsequently enemata of ordinary saline solution with a little glucose may be given as a nutrient. Large injections are undesirable as tending to produce vomiting. It is advised to apply ice to the epigastrium, but the writer is not satisfied of its efficacy. Repeated bleeding has been checked by a twenty-minim dose of turpentine, rubbed up with albumen. Ergotin in one or two-grain doses is employed sometimes, but the writer has had no experience as to its value. Adrenalin, ten minims of one in a thousand solution, is given as a hemostatic, and the author has employed it, but he is not sure that it is quite free from objection, and is not satisfied as to its importance. As a matter of experience, with absolute rest for the patient and absolute non-interference with the stomach, he has found that these cases generally do well, and make good progress toward

recovery. There is no risk in a partial starvation for a few days.

It has been alleged that hematemesis may occur without any breach of the gastric mucosa. Duckworth is very doubtful as to this, and strongly suspects that in such cases there has been an erosive lesion. These erosive patches are hardly detectable save for their bleeding during life on opening the stomach, and at a necropsy there may be absolutely no signs of them owing to digestive and post-mortem changes.

In hemorrhage dependent on cirrhosis of the liver much the same treatment is to be employed as just described—absolute rest and quietude, and nothing is to be given by the mouth. The prognosis is always grave, and repeated vomiting of blood with a fatal issue is the common experience in these cases.

In cases of gastric ulcer which prove rebellious to prolonged medical treatment, or manifest signs of adhesion of the stomach to adjacent parts, the operation of gastrojejunostomy is now proved to afford great relief and comfort to the patient. Careful feeding and a well-ordered life are necessary in all cases of gastric ulcer for many months after the lesion is believed to have healed. Unfortunately, it is often impossible to secure such management in the majority of these patients, who are seldom found amongst the well-placed classes of society. Hence we meet with relapses.—*The Therapeutic Gazette*.

## Reports of Clinical Cases.

### A Case of Varicose Epigastric Veins Following Phlebitis.

J. E. Lane, *Yale Medical Journal*, July, 1908—The patient had an attack of typhoid fever about seven years ago, during which both legs were swollen and painful. He presented himself with a number of healed and unhealed varicose ulcers on the left leg, with symptoms and signs pointing to a phlebitis of the veins of the extremity. The interesting feature was the presence of two large tortuous veins on the left side of the abdomen, one of which was evidently the superficial epigastric, the other the superficial thoracico-epigastric, running toward the axilla.

### Use of Potassium Iodide in Thickening of Arterial Walls.

Dr. J. H. Spitzly reports a case of arterial thickening in a male patient aged sixty-five. The patient complained of insomnia, muscular weakness and pain in the precordial region on the slightest exertion. After examining the patient he found the heart, lungs and urine normal, but further examination revealed thickening of the arterial walls which was plainly felt in the temporal and radial arteries. The patient was then put under the following treatment: four grains of a mixture of iodide and bromide of potassium three times daily, followed by hot foot baths before retiring. Under this treatment the patient began to improve and in a short time all his symptoms abandoned him and he was cured.—*British Medical Journal*. October 3, 1908.

### A Gigantic Renal Calculus.

Johnsen says that the largest kidney stone removed by operation heretofore reported is one described by Shield in the *Lancet*, October 15, 1904. This stone, which weighed 570 gr., had a length of 13 cm., and its largest lateral circumference measured 26 cm. A calculus recently removed by Pelz surpasses this specimen in size, though not in weight, as it measured 14.1 cm. in length, and its largest longitudinal circumference was 33.5 cm., and the largest lateral circumference 28.5 cm. Its surface was extremely irregular, and, owing to the very dense fibrous tissue growth its presence in the kidney had evoked, the removal of the stone, together with what remained of renal substance, could be effected only with the greatest difficulty. The patient made a good recovery.

### Miliary Tuberculosis in a Child Aged Four and a Half Months—Autopsy.

Drs. A. L. Kotz and E. M. Green, Easton, Pa., at the International Congress on Tuberculosis, reported the following: The patient, a female child, born December, 1907, at the age of two weeks was fed on cow's milk, and at the age of four weeks was given certified milk modified. She gained steadily until 12 weeks old, then gradually lost flesh; temperature averaged 99.4 F.; abdomen was much distended. The child died when four and a half months old. Lungs contained two small nodules only; one or two mediastinal glands were involved. The peritoneal cavity was completely obliterated, and the intestines firmly glued together. The tuberculous foci consisted of a mass of tubercles fused into flat yellowish mass size of lentil. In the pancreas these masses were numerous, completely disorganizing the organ. In the intestines the tubercles were entirely confined to the serous and subserous coats and these were completely packed with tuberculous deposits. The muscular layers and mucosa were atrophied with small-celled infiltration. The tuberculous masses consisted of lymphoid and epithelioid cells surrounding small foci of coagulation necrosis, giant cells rare. The tubercle bacillus was most abundant in the epithelioid layer and on the outer surface of the necrotic foci. They were almost absent in the necrotic tissue and near the giant cells. Most of the bacilli were shorter, thicker and less beaded than the ordinary bacilli found in human tissue. Investigation showed that the farm from which the first milk was obtained (although carefully managed and thoroughly inspected) had one or two infected cows. They were highly bred Jersey cattle. The certified milk came from ordinary healthy inspected cattle among which no infected cows were discovered. The child was evidently infected during the third and fourth weeks of life and so violently that death occurred three months later.—*A. M. A. Journal*.

### Gastric Tetany—Operation—Recovery.

Dr. John F. Erdmann, of New York City, at the annual meeting of the American Association of Obstetricians and Gynecologists, reported a case that occurred in his practice. The patient was a child, 5½ years of age. He was called to see the child on a Saturday at half-past eight. The history given was that the day



previous the child had eaten a small portion of rice and fresh fish. Following this there was an attack of vomiting with convulsions. Toward evening the convulsions became almost continuous. The previous history was that for a period of three years the child had manifested symptoms of tetany and had convulsions of greater or less degree, and was taken to foreign countries for treatment, but with no further suggestions than care as to the dietary. He was called by Dr. LaFetra for the purpose of opening the abdomen for an intussusception or intestinal obstruction. In examining the child he found that the trouble was not due to intestinal obstruction, but found an area of dullness on percussion which extended over the entire left half of the abdomen, the dullness extending to Poupart's ligament, passing over the median line, going up close to the umbilicus, with an area of tympany superimposed upon that which extended to the epigastric space. The child had been chloroformed two and a half hours previous to his visit as the result of the condition it was in from spasms; a catheter was passed through the nose, through which a large quantity of fluid was withdrawn with a considerable amount of gas. Within a period of 20 minutes, after washing out the stomach, the previous area of dullness and tenderness was practically normal. The child recovered from this attack. As to subsequent procedures, he could not state. The child developed pneumonia and empyema subsequently, passed into the hands of a surgeon, for the removal of a rib, but he understood there were no further attacks up to within a period of six months from the time he saw the child. The speaker was satisfied from the clear exposition given by Dr. Brown that this child suffered from gastric tetany due to gastric dilatation, but from what cause he did not know.—*American Journal of Obstetrics*.

### Foreign Body in the Iris.

The history here recorded is of more than usual interest.\* A foreign body imbedded in the iris stroma remained hidden for three weeks, at which time it presented as a minute black speck on the surface of the iris.

A carefully executed radiograph failed to show the presence of a foreign body, this being the second case during the year in my service in which a foreign body was recovered with absolute preservation of vision, in which the x-ray examination was negative.

The possible loss of the affected eye and the danger of sympathetic involvement of the fellow eye, justify a most extensive search, even though this usually positive diagnostic aid has pointed negatively. It must be remembered that if the fine edge of a minute piece of steel presents itself to the x-ray plate, it is possible that no impression may be made.

J. C., age 28, visited my service at the Episcopal Hospital during November, 1907, with the following story: Two weeks before, while cutting a steel wire cable, a minute sliver of steel flew into his right eye, having penetrated the

cornea down and in, the point of entrance being indicated by a minute corneal cicatrix.

The iris was fairly dilated, the lens and capsule opposite the papillary area were transparent. Pronounced pericorneal injection was present, with lachrymation and moderate tenderness.

An x-ray was negative. One week later, when I saw the case for the first time in consultation, a minute black speck was seen in the iris down and in, which was regarded as the foreign body, it having buried itself in the iris tissue for about three weeks.

The character of the injury was explained carefully and the patient consented to enter the hospital for magnet operation just four weeks after the original accident.

After etherization the Sweet magnet was applied to the cornea opposite the position of the foreign body, and promptly drew the portion of the iris in which the foreign body was imbedded in a mass of exudate toward the cornea, but failed to dislodge it.

A small corneal section was made at the limbus down and in, and the magnet applied to the lips of the incision. The minute piece of steel failed to leave its exudative bed until a small area of iris presented itself through the wound.

It was thought wise, therefore, to make a small iris section. After the iridectomy had been made it was discovered that the foreign body had made a faint scar on the capsule.

The usual lotion was applied and atropine instilled. The healing process was comparatively prompt and entirely uneventful, and normal vision secured.

We have been using the magnet of Dr. Sweet for the past two years in our service, and during that period it has not failed to remove a single foreign body in any eyes that have been presented for treatment.—Reported by G. Oram Ring, M. D., Philadelphia, in *Monthly Cyclopaedia and Medical Bulletin*.

### Birth of Quadruplets.

Henry A. Nave, M. D., Argentine, Kan.

*Mother's History*—Mrs. L. C. T., aged 35, American, weight 112 pounds, height 4 feet 6 inches, married twelve years, had had seven children, of whom four are still living; two were born prematurely at six and seven months respectively, and one died at the age of three months, cause of death unknown.

*Present Labor*—I was called to attend the patient July 19, at 1:30 A. M. The os and cervix were well dilated and the amniotic sac was protruding. Within ten minutes the first child, a boy, was born; it seemed small, and on tying the cord I was surprised to find four umbilical cords braided together. Within fifteen minutes another boy was born, thirty minutes later a girl, half hour later another boy.

*Description of Placentas*—There were two placentas, one with three cords, and the other with one. They were delivered in a macerated condition.

*The Children*—The length and weight of the children were as follows: First child, length 9 inches, weight about 4½ lbs.; second, length 8¾ inches, weight about 3½ lbs.; third, length, 8½ inches, weight about 2½ lbs.; fourth, length 8 inches, weight about 2 lbs. In the case of the child delivered last it was necessary to resort to artificial respiration for a few minutes. The

\*Patient was exhibited before the Ophthalmic Section of the College of Physicians at the December meeting before the operation, and at the January meeting when the final result was accomplished.

others breathed naturally. The children seemed normally developed, though small. The second child began to nurse on the second day and was apparently the only one able to swallow. The first born child lived 24 hours, the second 4 days, the third 8 hours and the fourth 18 hours.

The mother's convalescence was uneventful except for a slight rise in temperature for a few days immediately succeeding delivery.—*A. M. A. Journal*.

### Ophthalmia Neonatorum Treated by Zinc Ions.

H. K. Ramsden, in *British Medical Journal*, November 7, 1908, describes the recent treatment of a case, claiming that many cases of corneal opacity can be prevented by the method employed. The conjunctiva of the diseased eye was everted and a positive electrode which consisted of some cotton-wool saturated in a 2 per cent. solution of zinc sulphate was applied. The nurse held the negative electrode in the child's hand. The battery employed was an ordinary bichromate battery, which gave twenty volts, and half a milliampere current was passed for three minutes. Twelve hours after the application the inflammation was subsiding and another application was made. Two days later the case was cured. In the author's experience the case ordinarily treated by silver nitrate or protargol applications (twice a day) would have taken fourteen days and would have been an anxious one.

### Left Pyelonephritis from the Gonococcus in a Child of Six.

Artemio Margrassi (*Riv. di Clin. Ped.*, May, 1908) describes a case of pyelonephritis which occurred in a child of six years who had had a cystitis from gonorrheal infection. The extreme rarity of the condition in a child renders the case one of interest. When the patient was first seen she had a rounded tumor of elastic consistency in the left colic region, with turbid, acid urine containing albumin, pus cells, a few blood cells, and flattened epithelium. The child was anemic and cachectic and suffered from attacks of renal colic. The author found by examination and isolation of the urine of each kidney that the right kidney was in a normal condition and he removed the diseased kidney, which was the seat of an abscess and marked granulations of the pelvic lining. The child made a good recovery from the operation. When seen for another trouble some time afterward, she was well and the kidney was functioning normally.—*American Journal of Obstetrics*.

### Youngest Mother on Record.

A colored girl of Steubenville, O., aged eleven years and eight months, gave birth to a male babe at full term on September 19th, and is, therefore, one of the youngest mothers on record. The little girl was taken ill while testifying as a witness before the grand jury; she was removed to her home and in a few hours became a mother. The little mother and child are doing well.—*Ohio State Medical Journal*.

## Medico-Legal.

### Having a Diploma Does Not Make a Licensed Physician.

The Supreme Court of Alabama says, in *McAllister vs. State*, where it was averred that a certain person was a licensed physician, that the fact that the physician had a diploma did not prove it, and to allow him to testify that he had such a diploma was incompetent and illegal evidence. Furthermore, the diploma, if of any value as evidence, should have been produced, and hearsay evidence of its contents was inadmissible.

### Dying Declarations in Abortion Cases.

The Supreme Court of Oregon says, in the case of *State vs. Fuller*, that the dying declarations of a woman on whom an abortion had been performed were not originally admissible in evidence, on the ground that her death was not an essential ingredient of the offense, which was complete without it; but when her demise, as a result of a premature delivery produced by another person, is made by statute an indispensable constituent of the crime as charged, her dying declarations are receivable in evidence. To exclude that part of the dying declarations of a pregnant woman that tend to prove that the means employed by another person to procure her miscarriage were unnecessary to preserve her life might render convictions in such cases impossible; and, in view of the consequences thus assumed, the court believes that necessity demands that her declarations, tending to establish such constituent of the accusation, are competent evidence.

### An Interesting Decision on Criminal Abortion.

The legal decision in the following recent case has been much commented on in medical circles: A girl in the seventh month of pregnancy was suddenly seized with pains, and by the aid of a midwife was delivered of a hydatid mole. The local registrar was not notified. As notification of births is compulsory in this country, both women were imprisoned on suspicion of criminal abortion when a medical man, who was called in afterward, insisted on notification. The judge's decision was that although the girl had not been delivered of a human being, yet the fact that she had confessedly used some means to procure premature emptying of the uterus, without exact knowledge of its abnormal contents, made her action criminal. The omission to give notification of the delivery itself constituted a breach of the law. The penalty was three weeks of hard labor for each woman; but they were later released, pending the result of a petition for mercy.—From Vienna letter, *A. M. A. Journal*.

### Physical Inability to Work.

The Supreme Court of Nebraska says, in the case of *Keith vs. Chicago, Burlington and Quincy Railroad Company*, that railway employees only were permitted to join the relief



department of the defendant company, an institution organized to pay disability benefits to members. The contract for benefits provided: "The word 'disability' shall be held to mean physical inability to work." The court holds that the words "physical inability to work" mean inability to perform such labor as the injured member was engaged in at the time of his injury, or similar labor which would enable him to earn wages equally as remunerative. Under the provisions of such a contract, if an injured member of the relief department recovers so that he is able to perform such work as is contemplated in the contract, or similar work equally as desirable and remunerative, then the obligation of the defendant to pay disability benefits ceases. But recovery sufficient to enable him to earn much smaller wages at some other employment, or employment procured through the charity or indulgence of friends or relatives, when, in fact, he has not recovered from his disabilities, is insufficient to release the defendant.

#### Privilege Extends to Physician in Charge of Hospital.

The Supreme Court of Missouri, Division No. 2, holds, in the personal injury case of Beave vs. St. Louis Transit Co., that there was no error in refusing to permit a physician to testify as to the extent of the plaintiff's injuries and his condition while in the hospital and under his control. The evidence showed that the physician had charge of the hospital in which the plaintiff was placed shortly after his injury; that he examined him every day or so, because, as he testified, he was responsible for every person who entered the institution for treatment; that his associate and assistant physicians and surgeons, under his supervision, treated and operated on the plaintiff for his injuries. The knowledge thus acquired by the physician of the plaintiff's condition fell within the spirit, if not the letter, of the statute which prohibits physicians and surgeons from divulging information acquired by them regarding the ailments of their patients while prescribing for or treating them. The mere fact that the physician did not, in fact, prescribe for or treat the plaintiff in no manner changed the rule, when it was shown that he had charge of the patient through his assistants, and that he was being treated by them under his supervision.

#### Railway Surgeons Who Are Not Permitted to Have Passes.

The Supreme Court of Nebraska says, in the case of State vs. Martyn, that the defendant, a physician, made a contract with a railway company to furnish all necessary surgical and medical treatment to the sick and injured employees of the railway company free of charge to said employees, and also render such services to passengers and others, for whom the company should request the same, between certain stations in Nebraska, for which he was to receive an annual pass on the Nebraska division of said railroad, together with trip passes on other divisions thereof, and \$25 per month during his employment. The defendant was prosecuted for accepting a pass in violation of law, and it is

held that the district court erred in directing the jury to find the defendant not guilty, and discharging him from further prosecution. The Supreme Court holds that a contract between a railway company and a physician, by the terms of which he is to receive for professional services to be rendered by him for the company, at its request, the sum of \$25 per month and an annual pass over its lines of road, where the physician does not spend a major portion of his time in the employment of the company, is prohibited by the provisions of sections 10,664, 10,665 of Cobby's Annotated Statutes of Nebraska in 1907, commonly called the anti-pass law, and the acceptance and use of such a pass by the physician renders him guilty of a violation of those sections.

#### Statements of Patients as to Past Pain and Evidence in Malpractice Cases.

The Supreme Court of Vermont says, in the case of Wilkins vs. Brock, that where a patient makes statements of past pain and suffering when that information is necessary to a correct diagnosis, statements of it may be testified to by the physician as forming a part of the basis of his opinion. In such cases the statements of the patient have no hearsay quality, but are treated merely as observed facts, forming part of the physician's data, and bearing on the weight of his opinion, without regard to their correctness or incorrectness. But when such statements are used as direct testimonial evidence of the truth of what they assert they are carried beyond their legitimate scope, for, as to that, they are nothing but hearsay.

The court also holds that, in an action for malpractice, it is not enough to show merely that the treatment was injurious, but it is necessary to go further, and show by competent witnesses that the requisite care and skill were not exercised in giving it. Such is the doctrine of all the cases. Testimony that a patient was hurt by a treatment does not tend to show malpractice where the most that can be claimed for it is an implied admission that the practitioner hurt her by reason of overrating her strength to endure the treatment. Error of judgment is not enough, unless it is so gross as to be inconsistent with due care.

#### Sued for Saving Her Life.

Vienna was recently the scene of a suit of this character. A woman suffering from tuberculous disease of the vertebral column charged a surgeon and his assistant with having caused the disease by means of manipulations successfully instituted to bring her back to life, in collapse, under an anaesthetic. During the operation, a gynecological one, the respiration ceased and recourse was had to Sylvester's method, and after a while respiration was restored. She was able to leave the hospital in four days. Noticing a few weeks later that there was something wrong with her spine, she accused the surgeons with having injured it. It was proven by the clinical history of the woman taken before operation, that she had already been under hospital treatment for tuberculosis of several organs, including bones, for some years. The vertebral trouble could, luckily for the defendants, be diagnosed as tubercular without any trouble. The judge not only dismissed

the case, but added that he had hardly ever known a charge so unjustly made. The woman, he added, should be grateful to the doctors for having saved her life, even had they really done her some harm, which he was glad to say was not the case.—Reported by E. S. McKee, M. D., Cincinnati.

### Vision and Accident Insurance Indemnity.

Dr. Wurdemann, of Milwaukee, Wis., contributed a paper to *Northwest Medicine*, August, 1908, from which we extract the following:

In fixing the value, cost or price, as it may be termed, of any injury, the rule of compensation must be applied to each individual case, and this for many forms of accident or injury is a most difficult matter. Our common law holds that "compensation is the basic principle of the law of damages, the measure thereof being limited and controlled, and the elements of recovery primarily determined by this fundamental consideration." We are also told by the books that "There are frequently elements involved so wholly unsusceptible of money valuation that the measure of recovery must be left largely, if not entirely, to the discretion of the jury. This is noticeably the case in actions for damages for personal injuries where physical suffering has resulted, and, likewise, where mental distress has been a consequence of the defendant's act."

### MEASURE OF DAMAGES.

Damages is defined as "the injury or loss for which compensation is sought," and the measure of damages refers to the amount of such injury or loss. Three distinct conditions are recognized and awarded to suit the merits of the case:

*Nominal Damages*—Some trifling sum which is awarded when a breach of duty or infraction of the plaintiff's right is shown, but no serious loss is proven to have been sustained. Such are awarded for violation of a plaintiff's right, but where no damages are shown by the evidence.

*Substantial or Compensatory Damages*—These are such as are designed and awarded to compensate for the actual loss or injury sustained. The jury weighs the evidence and fixes the amount which in their opinion properly compensates the injured party for the loss suffered.

*Exemplary*, also termed vindictive, or punitive, damages. This class exceeds the loss actually sustained, and is given as a kind of punishment to the defendant.

Thus, in America, the price to be paid as compensation for an injury is left to a jury trial, which, unless the verdict be so excessive or grossly inadequate as to indicate passion, prejudice, or corruption, will generally be allowed to stand, though the courts presiding in such cases have always asserted and exercised the right of setting aside such verdicts as, in their judgment, are so wholly disproportionate to the injury suffered as to indicate passion, prejudice or corruption on the part of the jury.

It will be remembered that it is the province of the courts not only to set aside verdicts which are considered excessive and oppressive, but it is also their duty to set aside such verdicts as, in their judgment, may be inadequate, and it will be of interest to the profession to know that, so far as my investigation has gone in the leading legal authorities on this subject, the highest

verdict which is reported to have been set aside was that in favor of a physician. I refer to the case of Phillips vs. London R. R. Company, etc., reported in Twenty-ninth Moak, on page 177, where a verdict of £7,000 for "injuries sustained by plaintiff through the negligence of the defendant," was set aside as inadequate on the ground that "the jury must have omitted to take into consideration some of the elements of damage." "The plaintiff, who was a physician in the prime of life, having a practice worth perhaps £7,000 (\$35,000.00) per annum, was reduced by the injury to a condition of helplessness, with every enjoyment of life destroyed, and with the prospect of a speedy death."

(Dr. Wurdemann then cites fourteen cases in which damages were given by the lower courts, and sustained by the higher, for injury to vision, running from \$2,000 to \$18,500. We cite only the last two.—Editor.)

Twelve thousand dollars was awarded a young and pretty woman stenographer in the Superior Court of Milwaukee (December 3d, 1904) for loss of an eye. She had suffered greatly for a long time from inflammation, and the eye was finally enucleated. Suit was brought for \$25,000 damages. *Olwell vs. Skobis*.

This verdict is eclipsed by a judgment in Boston of \$18,500, given June 10, 1904, to a stenographer for loss of an eye from alleged negligence of a railway corporation. This shows what a sympathetic jury will do for a young and pretty woman.

To those who are conversant with the scientific estimation of the resultant economic damage from injuries to the eyes, it is remarkable that the exact mathematic demonstration shown by the methods of Magnus so nearly coincides with the empiric amounts allowed in the law courts and by accident insurance corporation—especially for the loss of both or one eye. All the companies give the full life indemnity for total blindness of both eyes, thereby recognizing the fact the visual earning ability is synonymous with the total earning ability.

### RESUME.

1. The present usages for the estimation of pensions, insurance and damages at law, for injury to vision, are based wholly upon precedent and are purely empirical.

2. The relation of the visual act to the earning ability is susceptible of mathematic demonstration.

3. The probable loss of wages, i. e., the effect on the earning ability of the individual, may be determined by the particular injury to vision.

4. (a) Insurance contracts will probably be continued under the present business arrangements, but could be made equitably, subject to the amount of economic damage—a percentage of the sum for total disability being paid for partial losses. In the case of loss of vision of one eye the rates should be modified to between 18 to 30 per cent. of the total disability; (b) For the settlement of pensions and annuities the full annual economic damage should be paid; (c) For the settlement of claims at law the probable economic damage should be estimated and considered the principal element, subject to business discount and to additions for the actual expenses consequent to the accident, and empirical amounts for the pain and anguish thereto incurred; contributory negligence and other le-



gal factors being also considered in the verdict.

5. The calculations and rules of Magnus and Wurdemann afford a method of estimating the amount of the probable economic damage in a manner fair and just to all parties and agreeable to all legal demands.

### Revocation of License by State Board Constitutional.

Kennedy vs. State Board of Registration in Medicine (Supreme Court of Michigan, 1906) 108 N. W. 730.—Complainant was a licensed physician and brought suit against the State Board of Michigan to enjoin that body from revoking his certificate. He had been cited to appear before the board to answer charges on account of an advertisement inserted at his instance relative "to venereal diseases and containing matter of an obscene and offensive nature derogatory to good morals." The statute specifically conferred upon the board the power to revoke under those conditions. Complainant contended that a revocation of his certificate of registration is an exercise of judicial power. The court held that the constitutionality of such provisions has been clearly established by the best considered cases as a proper and legitimate exercise of the police power of the State.

Note.—The case is in complete accord with the recent Missouri case of State ex rel McAnally vs. Goodier, which was the subject of our discussion in our editorial appearing in the April issue, Vol. 13, Number 4, at pages 386-389 of this journal.—*Journal Missouri State Medical Association*.

### Suit Against a Quack Company.

There was recently tried in England a case against a quack which we would like to see given wide publicity in this country, because it illustrates one of the greatest dangers to the people of quackery and because the same thing goes on daily in all of our large cities. The harm of allowing ignorant and irresponsible persons to treat diseases lies not so much in what they do as in what they leave undone, through their ignorance and inability to recognize grave diseases at a time when proper treatment offers a hope, and sometimes a certainty of cure. This is particularly the case with cancer. The plaintiff in the case alluded to consulted one Hall, a quack who carried on business under the name of The Dr. Hall Hygienic Company. In August, 1906, the plaintiff had noticed a small lump or swelling in one of her breasts and she consulted the defendant who had before treated her for indigestion, and had since plied her with his pamphlets and advertisements. He professed his ability to cure her breast and during treatment, which lasted for more than a year, assured her that she was not suffering from cancer, which she suspected and dreaded. His treatment included fomentations, ointments, baths and herbal concoctions, and his scientific attainments and methods of persuasion may be judged by an extract from one of his letters written to her when she was rapidly and evidently growing worse: "Since seeing you last Friday we have thought about your case. We are pleased to know of the improvement which has taken place in your general health. This

would have a tendency to draw the diseased condition from your body into the breast and throw it out, so that the main disease would be practically in the breast itself instead of scattered all over the body." In September, 1907, the plaintiff's condition and sufferings were such that she could persevere no longer, and she consulted a surgeon who diagnosed cancer, formed the opinion that an immediate operation would be her only chance, and excised the breast on the following day. It was, however, too late for any kind of remedial measures to be possible, and at the trial of the action the poor woman entered the witness-box as one beyond hope of recovery and apparently with but a short time to live. Her claim was made against the defendant upon the ground that by his false representations as to his ability to effect a cure she had been prevented by him from consulting a qualified surgeon, with the result that she had had to undergo a painful operation without any prospect of a permanent cure. After hearing all the evidence in the case the jury promptly rendered a verdict for the plaintiff for six hundred pounds (3,000 dollars).

A few such verdicts in this country would go far toward putting a stop to this villainous and cruel business.—*St. Paul Medical Journal*.

## Reports from County Societies.

### BERGEN COUNTY.

#### By Valentine Ruch, Jr., M. D., Reporter.

The Bergen County Medical Society held its regular meeting at Elks' Hall, Hackensack, on the evening of December 8th. The meeting was exceptionally well attended and a most interesting program was provided.

Dr. N. B. Potter, of New York City, read a most interesting paper on "Therapeutic Uses of Vaccine."

Dr. W. B. Coley, of New York, spoke on the present status of the mixed toxins and the treatment of inoperable sarcoma.

Dr. Mitzler, of New York, gave interesting data of the therapeutic uses of the anti-meningitis serum.

In conclusion Dr. W. H. Park, also of New York City, spoke at length of the "Preparation of Serum and Vaccines."

It is needless to say that these were very interesting subjects, were ably presented and did much to advance the knowledge of our members along the lines of serum therapy. It is the aim of our society to have men working along special lines, from time to time, come and talk on subjects of present-day interest.

Before the adjournment of this most enthusiastic meeting, our members expressed themselves most emphatically against the licensing of osteopaths and appointed a committee to wait upon the Assemblyman of this district, asking his support in this opposition.

Englewood, N. J., Dec. 21, 1908.

### CAMDEN COUNTY.

#### Henry H. Sherck, M. D., Reporter.

The December meeting of the Camden County Medical Society was held in the dispensary building, Camden, N. J., on December 10, 1908.

The president, Dr. Paul Mecray, occupied the chair.

Dr. Dowling Benjamin presented a very interesting paper entitled "A National Bureau or Department of Health." The paper was national in scope and dealt with the social problems of the day in a very able and convincing manner. Its propositions were taken up seriatim and were discussed in a scholarly and masterful style, showing that the doctor had given much thought to this important subject. Every physician and layman should read this message to the people, and as the doctor has been requested to present it for publication in the Journal it will be forwarded.

Dr. Joseph L. Nicholson, of the Cooper Hospital staff, reported a case of meso-colon cyst, which he removed, and the specimen was exhibited and presented to the society.

Dr. Daniel Strock, also of the surgical staff of the same institution, presented a remarkable case with complete recovery following operation of a fracture and dislocation of the twelfth dorsal vertebrae. The doctor exhibited the patient to the society and all were impressed with the perfect result obtained.

Dr. J. Watson Martindale, of Camden, one of the surgeons of the Kensington Hospital, Philadelphia, then read a very interesting paper, in which he reported two cases of pregnancy following operation for retrodisplacement of the uterus, by shortening of the round ligaments.

The following physicians were invited to sit as corresponding members: Dr. B. Hollingshead and Dr. Ralph Holingshead, of Camden; Dr. Tracy, of Burlington County, and Dr. Heritage, of Gloucester. Dr. Miller, a delegate from Cumberland County, was also present. The members all extend their sympathy to Dr. William R. Powell in his sad bereavement at the loss of his wife, who died on December 1st, 1908.

#### ESSEX COUNTY.

A meeting of the Essex County Medical Society was held on Tuesday evening, December 1st, at the Newark Public Library. Mr. James Taylor Lewis, counsel of the Medical Society of the State of New York, addressed the society on "The Effect of Organized Malpractice Defense on the Profession and on the Public." There followed a general discussion, which was opened by Drs. T. N. Gray, A. Wickman and T. Y. Sutphen. A resolution instructing the delegates of the Essex County Medical Society at the next meeting of the Medical Society of New Jersey to vote in favor of the plan for medical defense was unanimously passed.

Thirteen new members were elected. An amendment to the by-laws, increasing the membership of the council by adding thereto the officers of the society, was introduced and will be acted on at the next meeting. Two resolutions were passed—one requesting the Board of Freeholders to establish a hospital for advanced cases of tuberculosis, and the other commending the county prosecutor for his efforts to obtain the conviction of a physician indicted for inducing criminal abortion.

It is a matter worthy of note that this society—the largest county medical society in the State—has not within the memory of its oldest members been able to hold a meeting for the transaction of business except once a year, at the annual meeting. The consequence was that the

annual session was unduly prolonged and wearisome. The council and the other officers of the society are to be congratulated that their efforts have finally been successful and that business has been transacted, members elected, etc., at other times than at the annual meeting. It is to be hoped that other business meetings will be held before the first of April and that the pressure of business at the annual meeting will thereby be lessened.

#### GLOUCESTER COUNTY.

H. A. Wilson, M. D., Reporter.

The regular meeting of the Gloucester County Medical Society was held at Paul's Hotel, Woodbury, on November 21st. There was a large attendance and much interest manifested. Professor Hobart A. Hare, of Philadelphia, read a valuable paper on Pneumonia, showing the futility of routine treatment in the majority of cases, but advising the most prompt and heroic measures to meet special emergencies as they arise. We regret not being able to secure the paper for publication.

Whooping cough and measles were reported as prevailing in some parts of the county, but the most of the districts had a practically clean bill of health.

Mr. William C. Smallwood, of the New Jersey State Anti-Tuberculosis Society, was present and addressed the society at some length on the needs of the society and its aims. Twenty-four local committees have been organized and are fairly active, but generally there is great apathy, both lay and professional, throughout the State.

He strongly advocated the establishment of hospitals in various sections for the care of advanced cases.

The secretary was directed to write to our Senators and Congressmen urging them to support the measure to secure a National Department of Public Health in the Department of the Interior.

Dr. L. M. Halsey made an earnest plea for each member to urge our State legislators to oppose the proposed osteopathic measure.

After adjournment the society entertained at dinner Professor Hare, of Philadelphia, and Drs. H. H. Davis, of Camden; Joseph Husted, Cedarville; E. E. De Grofft, Woodstown, and Mr. William C. Smallwood, of Newark.

Woodbury, N. J., Dec. 21, 1908.

#### HUDSON COUNTY.

August Adrian Strasser, M. D., Reporter.

The regular bi-monthly meeting of the Hudson County Medical Society was held in Lincoln Hall on Tuesday, December 1, 1908, Dr. Mooney presiding. There was a large attendance. Every meeting seems to be more fully attended than its predecessor and unanimity and enthusiasm mark the proceedings.

Under report of interesting cases, Dr. William Pyle reported a case of fetal monster, the photographs of which he showed and passed about for inspection. The syncephalus was born November 14, 1908, from American parents, the mother being a vi-para, all previous children being healthy and living at present. There was a strong twin strain in three lines of the mother's



family. The fetus presented breech at one week past the eighth month, and at that time was alive, but only gasped slightly once after birth. It presented the following anomalies: There was one face, but two occiputs fused into one; there were four ears, two of which were in the back at the occiput and in close juxtaposition. There was one thoracic cavity, from which emanated four articulated and well-developed arms. There were two abdominal cavities with separate intestinal tracts; to each pelvis were attached two legs, four in all. The one part had the external genitalia of a female and a perforate anus; the other had no external genitalia and no anus, but had a large spina bifida. Neither one had an umbilical cord, but the placenta and membranes were in direct contact with each abdominal cavity.

Dr. Swiney detailed a case of sudden death in a boy hit by a crane; symptoms before death were indefinite and might have been due to a brain abscess. He also reported the following interesting case. Four years ago he had delivered a woman suffering with general anasarca, the fetus being in the same condition. She again became pregnant and the nephritis and edema promptly recurred. She aborted at the fourth month; the fetus again being swollen and edematous. Again in seven or eight months patient was impregnated, and once again was delivered of a dead child, being in same dropsical condition, but this time the mother had given no signs of any nephritis at all, either in the urine or by a general anasarca.

Dr. Goldstone demonstrated and reported a case of sclerema neonatorum.

Dr. Faison detailed a case he saw with Dr. Hill. On examination a pelvic mass was felt; on incision the mass was found taking up a good part of bladder and the ureter dipping down into it. Cystoscopy had been impossible. The tumor mass was excised from the bladder, excessive hemorrhage resulting; an inverted tube was sutured into the bladder and drainage kept up for seven days. In ten days the wound had healed. He related also a second case with sinister termination. Three weeks ago it was found necessary to curette an otherwise healthy young woman. Dilatation was carefully done and curettage done *secundum arte*. A very small amount of alcohol-soaked iodoform gauze was introduced into the uterus. Soon there was evidence of iodine poisoning; glassy, staring eyes, puffed face and collapse. Death occurred in fifty hours after operation.

Dr. Rosenkrans reported an aneurysm of the aorta in an Italian, thirty years of age, leading to rapid death after establishment of severe symptoms. He consulted him for a severe cough, and comparison of the wrist pulse showed the one on the right side practically gone. There was a diffuse murmur in the upper part of the chest. Quiet was enjoined and enforced, but sudden death took place. Necropsy revealed a large aortal aneurysm with hemo-pericardium; the aneurysmal sac and the pericardium were filled with fluid blood and organized clots. The heart itself showed no great abnormalities. History did not point toward syphilis, as he was the father of a number of vigorous children.

Dr. Bull pointed out that it was at all times dangerous to remove a polypus from the ear, as he had reason to know from a recent case. He had had in his charge a girl with a running ear,

discharging for many years. Examination revealed the presence of a polypoid excrescence of granulation tissue through the drum. He had always kept it within bounds by cauterization, but snaring having been advised by his colleagues, in the Eye and Ear Infirmary, he snared this one day, enjoining the girl to report immediately if anything untoward occurred. In four days marked pain and tenderness over the mastoid supervened, so that a radical mastoid operation had to be done. The case ended in recovery, but it taught a valuable lesson.

Dr. Koppel detailed the following case, where an infected finger was being soaked in solution of lysol; the patient plunged in the whole hand and kept it in the solution while the doctor made an emergency call in the neighborhood. This was followed by desquamation away up to the elbow on the infected side, but also the same condition on the other side. It was obstinate to treatment at first, but finally yielded to an ointment of red oxide of mercury.

Dr. King reported that he had seen a sudden death follow the free use of iodoform powder in the after-treatment of an operation for carcinoma of the breast. Dr. McMurra wished to put on record his treatment for alcoholism. He used a formula about as follows:

Take—Tr. nucis vom. 1 drachm, Ac. sulphur. dil. 1 drachm, ferri sulph. 1 drachm, syr. zingiberis 1½ ounces, Tr. cinchonae ½ ounce, Tr. podophylli 2 drachms, ether 1 ounce, ag. menth piper 6 ounces. A half ounce is given as a dose three times a day, without any diluent; gradually the intervals are lengthened until cessation of habit occurs. In reply to Dr. King's question as to whether his results differed in men or women; he said that he had not found any difference in the results in the sexes.

The paper of Dr. Charles L. DeMerritt, of West Hoboken, on "The Uterine Curette; Its Uses and Dangers," was then read and discussed. (This will be forwarded to The Journal later.) Drs. Faison, Strasser, Hasking, Rector and Swiney participated in the discussion, which was closed by Dr. DeMerritt.

The business of the society was the passage of an amendment to Chapter V, Section 1, of the By-Laws, reading "The admission fee of \$1.00, and one year's dues, shall accompany the application, which will be returned if the application is not accepted." This was carried.

A resolution in memory of Dr. West was also passed.

Dr. Trangott J. Schuck, of 1020 Hudson street, Hoboken, was elected to membership. The legislative committee reported and offered several resolutions relative to the new tuberculosis hospital and its management, which were carried. The society then adjourned.

#### OCEAN COUNTY.

Ralph R. Jones, M. D., Reporter.

The Ocean County Medical Society held its annual meeting at the residence of Dr. V. M. Disbrow, Lakewood, October 24, 1908. The following officers were elected: President, William G. Schauffer, Lakewood; vice-president, Otto C. Thompson, Cassville; secretary, Alex. M. Heron, Lakewood; treasurer, Irwin H. Hance, Lakewood; reporter, Ralph R. Jones, Toms River; annual delegate to State Society, V. M.

Disbrow, of Lakewood (Dr. W. G. Schauffler is the permanent delegate).

On motion the sum of twenty-five dollars to the New Jersey Association for the Prevention and Relief of Tuberculosis was donated.

The following new members were elected: Drs. Stewart Lewis and Marie Chard, of Lakewood; Dr. Fred N. Bunnell, of Barnegat. Dr. J. Edgar Todd, of Toms River, was proposed for membership, action, under the rules, to be taken at the next meeting.

Dr. E. C. Disbrow, a former member, is very ill at the Long Branch Hospital.

Prompt action on the part of Dover Township Board of Health stopped what threatened to be an epidemic of diphtheria and scarlet fever. There were 4 cases of the former and 3 of the latter.

### SOMERSET COUNTY.

A. L. Stillwell, M. D., Reporter.

The regular bi-monthly meeting of the Somerset County Medical Society was held at the Ten Eyck House, Somerville, at 3 P. M., December 10, 1908. There was a large attendance. Dr. J. W. Kennedy, of Philadelphia, was present and read a paper on "Attempts at Conservatism in Abdominal Surgery." He spoke of ectopic pregnancy and the dangers of delay in this condition; also the importance of early operation in perforative conditions of the intestines, and gave with some detail the technique in removal of the appendix. He also gave interesting statistics from the clinic of Dr. Joseph Price.

Mr. W. C. Smallwood, representing the New Jersey Association for the Prevention and Relief of Tuberculosis, was also present and gave a short talk. A committee of three members of the society was appointed to take action on the suggestions made by Mr. Smallwood.

### WARREN COUNTY.

John H. Griffith, M. D., Reporter.

The autumnal meeting of the Medical Society of Warren County was called to order by the president, Dr. E. H. Moore, of Asbury. In the absence of the secretary, Dr. Burd, Dr. C. M. Williams filled the position. The minutes were omitted.

The members present were: President Moore, Drs. La Riew, Smith, Dedrick, Curtis, Shimer, Cummins, Griffith, Reese, Bossard, Burd, Williams, also Drs. E. M. Green and T. E. Swan, of Easton, Pa., and Mr. W. C. Smallwood, secretary of the State Anti-Tuberculosis Society.

Mr. Smallwood gave an interesting talk on the work that had been done by the State society in the anti-tuberculosis campaign and suggested that a committee from Washington and Phillipsburg meet him to make arrangements for the State exhibit on tuberculosis. He suggested the following as an outline of what ought to be attempted: Placing of the State tuberculosis exhibit; registration and notification by physicians; disinfection of all homes in which tuberculosis has existed either at time of death or on removal of patients; the employment of visiting nurses to attend patients in their homes; medical inspection of public schools to prevent the spread of infectious and contagious diseases; the

organization of church and factory classes for tuberculous patients; the education of the public by lectures and the abating of the spitting nuisance; plan a tuberculosis day in the schools when all grades above the sixth will be addressed by a local physician on tuberculosis and circulars distributed, to be taken to the homes.

His address was greatly appreciated and his outline of work will be used so far as possible in Warren County.

Dr. E. M. Green, of Easton, Pa., an invited guest of the society, gave a very interesting and practical talk on his visit to Washington, D. C., to attend the International Congress on Tuberculosis. The meeting was full of interest and all went away greatly pleased, feeling refreshed by the excellent dinner served at the Lee House, and that the committee of entertainment deserved the thanks of the society unanimously expressed.

## Daily Press and Magazine Items

### Knowledge.

(From *Collier's Weekly*, December 19, 1908.)

This is the age of science. In some ways we are inferior to certain ages of the past. In knowledge of nature, and ability to harness her to our ends, some of the greatest victories are recent. There is a new application of morality brought with each new fact. Says Metchnikoff: "Formerly any one was at liberty to teach that whales were fish; but now that it has been proved that whales are mammals, the mistake is not to be pardoned. Since medicine has become more of an exact science, the liberty of doctors has been restrained. Practitioners have already been sentenced for neglecting antisepsis and asepsis. Other forms of freedom, such as the freedom to neglect vaccination against smallpox, to spit on the floor, or to let dogs run loose without being muzzled, are worthy of savage days and will cease as civilization advances."

The English Antivivisection Society is now selling little copies of the statue to a vivisected dog, which they raised in London. In setting themselves against "merciful vivisection," these people set themselves against humanity. It is through them that in surgery and medicine proud Britain marches in the rear.

### State Inebriates' Home.

(Editorial in the *Newark Evening News*, December 17, 1908.)

The report of State Dependency and Crimes Commission recommends, in substance, that a State home for inebriates be established, where men and women may be sent for treatment by the best and most approved modern methods for the cure of advanced cases of the disease known as chronic alcoholism. The method now in vogue, of sending drunkards to jail time after time, simply letting them get sobered up and then releasing them to go to the nearest saloon and get drunk again, is to be abandoned and something better substituted if the commission's recommendations are adopted.

The idea is to treat confirmed inebriety as a disease, not as a habit, and this formal sugges-



tion on the part of the commission is neither new nor unexpected. Last June Dr. Rosenwasser, a member of this same commission, read a paper before the State Medical Society, advancing and strongly supporting this view. He then insisted that the common method of dealing with drunkards was inhuman and barbarous and a relic of the dark ages.

As was then shown, this theory is not lacking in experimental support. For upward of fifty years the Washington House, in Massachusetts, has successfully cared for and treated drunkards; for sixteen years a similar institution at Foxboro has brought about many cures. Iowa and Minnesota have established inebriate homes with excellent results, and Switzerland has its home which has cured many who were supposed to be past all efforts to keep them from filling drunkards' graves.

Assuming that Dr. Rosenwasser's contention that inebriety is a disease, and that the State's duty and best policy is to build and maintain a home for inebriates, it becomes a serious question who should pay for this home. Railroads are held accountable for any damages they do to either persons or property. There is strong talk of making automobilists pay for any injuries they inflict by the careless use of their machines. The policy of the State is somewhat like the old Mosaic law—an eye for an eye, a tooth for a tooth, or its equivalent in the coin of the realm.

Is it unreasonable to extend this policy, and to say that those mainly responsible for drunkenness and confirmed alcoholism should pay for the building and maintaining of an institution which is devoted to the treatment and cure of inebriates? As the law stands to-day, it prohibits the sale of intoxicating liquor to an intoxicated person. Is it not warrantable to go further and enact that those who have been made drunkards shall be treated and cured at the expense of those who are chiefly responsible for spreading this disease and becoming wealthy in the process?

### **"Prevention" With Special Reference to Unnecessary Blindness.**

(From *Century Magazine*, September, 1908.)

"Efficiency," as a new watchword for philanthropy, government and business, was the subject of comment in this department a while ago. The word is being more and more used. Mr. Allen's book and the promulgations of the Bureau of Municipal Research, have helped the dissemination of the word and the idea, till now even advertisers have taken it up, and this quality of efficiency is earnestly claimed as an important element in contrivances put upon the market.

Another watchword seems to be acquiring new life and significance in our busied existence, and this is the familiar word "Prevention." We hear it on all sides, in fields sacred as well as secular. In the realm of finance, thoughtful experts study fundamental means for the prevention of evils rather than methods of temporary relief.

In the treatment of crime philanthropists are taking less and less interest in punishment and devoting themselves more and more earnestly to cure and to prevention. It is the evident re-

lation of drunkenness to crime that has given strength to the anti-liquor agitation. In every area of the sociological and philanthropical field—in dealing with the question of poverty and allied subjects—prevention finds increasing favor, running, indeed, at times, as is natural, into ill-considered, ignorant, extravagant and faddish schemes, proposed sometimes in cheerful disregard of the very laws of our being. In the religious world we find that the "old fashioned" methods of evangelical agitation, though by no means disused, are partly set aside in the minds and methods of many leaders of religion, for energetic efforts of a different sort. The *Outlook*, the other day, spoke of the "old evangelism which aimed only to correct individual sinners," and of the "new evangelism which aims also to reform the social evils and wrongs that breed sinners."

In medicine, prevention goes hand in hand with cure, and with such ingenuity and energy is the former pursued that year by year lives are saved in incalculable numbers, and the future is bright with the promise of still more effective methods of life-saving by the wholesale. In this connection should be noted Dr. Ditman's recent important suggestions in *"The Columbia University Quarterly"* with regard to the study and practice of preventive medicine. He advocates the establishment, in one of our great cities, of a "School of Sanitary Science and Public Health" which should give training in the known methods of preventing disease and opportunity for study of further preventives. He urges also the scheme of a National Board of Health and presents an array of facts in themselves overwhelming arguments in favor of action along the lines laid down. In this general direction is the useful activity of the American museum of safety devices, a natural and now separate outgrowth of the Institute of Social Service. The methods more and more extensively put into operation for the cure and prevention of tuberculosis, are becoming yearly more familiar to every community. As to the prevention of unnecessary blindness,\* this is a matter which the physicians of the country have been alive to these many years, but which the New York Association for the Blind has just taken up by means of a special committee. This movement resulted from the fact that a member of the new association, who has been a leader in far-reaching measures of philanthropy, recently became impressed by the startling fact that—as Dr. F. Park Lewis puts it—"from thirty to forty per cent. of those who are blind need never have become so had proper measures been taken at the right time to prevent this affliction." In this case the method of prevention is a simple and absolutely painless precaution to be exercised with new-born children—a method invented a quarter of a century ago in Leipsic, and now known and generally approved throughout the medical world.

The work of the special committee, in co-operation with competent physicians and State authorities, will doubtless be taken up in other States of America, and before another quarter of a century has passed this one device of pre-

\*See "Prevention of Unnecessary Blindness a Public Duty," by F. Park Lewis, M. D., president of the New York State Commission for the Blind. "Outlook for the Blind," Cambridge, Mass.

vention will doubtless be the means of saving from misfortune thousands of members of the human family who will never have known of their danger. Should this prevention become universal the hardship of blindness would be diminished to an extent it is impossible to compute.

And is it too strained an optimism for us to look forward to a time when the danger of this phase of blindness, as of other preventable diseases, will, by purer and more sanitary living, be largely removed from the ill to which humanity is heir? That day of radical prevention will be hastened by a franker and more scientific attitude on the part of both physicians and the public. Already signs are multiplying of a great and widespread awakening — an awakening which may do that for humanity which has been for centuries the dream not only of the "wise physician," but also of the long line of the world's great preachers, prophets and poets.

### Cures Come High for the Wealthy.

(Article from *The Tribune*, New York City, November 29, 1908.)

"How much do I owe you, doctor?"

"Really, my dear sir, I haven't had time to investigate your income and look up your rating in Bradstreet's" —

"Thunder! What's my income got to do with your bill for services? When I buy a thing I want to pay the market price, which is ultimately based on the cost of production. You evidently want to reverse the economic law and charge all the traffic will bear, like the big monopolies. Why, man, that's unnatural; it's like those Oriental shopkeepers!"

"Gently, my friend. You don't understand the ethics of the medical profession. We physicians are not to be classed with manufacturers or traders. Do they ever give away anything? A large part of our practice is charity. Our prices justifiably range from nothing up to several thousand dollars. Our services are humanitarian, like those of the clergy; they are often priceless, and cannot be balanced on a scale of dollars and cents."

"That sounds sort of reasonable, doc. I feel like apologizing. Only it must be hard for you professionals to figure out the details of a bill, making it match with the patient's necktie and his diamonds, and all that. Maybe, the patient's wearing a 'phony' stone, or he's dressed 'way beyond his means, or he's a rich man dressed cheap. You must be Sherlock Holmes to know the right price to charge when you haven't time to investigate and want cash on the spot."

"It is an art," admitted the physician. "In the words of an eminent surgeon quoted in *The North American Review* by Dr. A. C. Heffenger, 'The fixing of a fee correctly is a talent which is either born in a man or only learned after long experience. The physician should endeavor to ascertain the patient's circumstances. He can thus be in a position, knowing as he does the gravity of the operation or its triviality, to say what the operation is worth to the patient. The physician is necessarily the better judge of the two. \* \* \*'"

"That's a beautiful theory; I'll sure read that article," said the patient, hastily scribbling a check of sufficient proportions to avert an in-

quiry at his bank. "Still, you can always argue on the other side, and I know some men who'd rather judge for themselves what an operation was worth, to save their lives or otherwise. A man who isn't particular about living wouldn't like to pay a fancy price. An operation may seem elegant to the operator, like a painting does to the painter, but that doesn't take account of the customer."

No standard price for medical services is possible, according to the argument of Dr. Heffenger. The fee evolves with the evolution of the pocketbook. It is claimed that one-third of New York City practice is charity, and much of that illegitimate. Those short-sighted persons who object to a sliding scale do not realize the nature of professional services. There was a mother who objected to a metropolitan surgeon's charge of \$1,000 for removing her son's appendix, and wanted to pay only \$600, but the surgeon had witnesses to prove that the filial appendix was worth the price, and he received the full amount. The mother, perhaps with characteristic feminine lack of logic, failed to see the connection between a fat bank account and a plethoric appendix, and that the removal of one should naturally result in the reduction of the other. From another point of view, this appendix had been distended with Rialto lobsters and other costly foods, instead of corned beef and cabbage, and it was worth something to restore the young man to an exalted digestive career.

The possession of great wealth carries with it heavy obligations, it is stated, and these obligations are rightfully cashed by the practitioner. Some wealthy men don't have the instinct of distribution, like college builders and library givers, and these need encouragement. Legal fees are no more invariable than medical fees; they depend on the amount of money involved in a lawsuit or the wealth of the client and the jeopardy of his position.

American fees are not worse than English. A city specialist charges from \$5 to \$20 for an office visit and asks about \$150 for half a day's trip out of town. A day or two spent away from the office is worth between \$500 and \$1,000. There was a railroad owner who hired an obstetrical specialist to remain with his daughter during a critical period which lasted for two months. The service was successfully performed and it was well worth a fee of \$7,000, being at the rate of \$100 a day and a bonus of \$1,000.

An ordinary man with a fractured finger going to an ordinary surgeon might pay a trifling fee, but when a rich polo player had his broken finger attended by an eminent New York surgeon it cost him \$1,000. The finger was worth that in polo playing for that particular polo player. Again, there was a person of means who had an appendix removed from the left side and paid \$15,000 for the job. He was perhaps thankful that the appendix was not on some other side. Laparotomy, which is a more unpleasant operation than it sounds, was executed on the wife of a wealthy Bostonian, and the grateful husband guessed about right when he sent a check for \$10,000 to the surgeon.

Some bills are necessarily rendered to the estates of the deceased person. In one such case \$25,000 was netted by a physician for a week's final services. A week still better paid was that of a family physician "who attended a



patient in a yacht from New York to a port in one of our Southern States." The patient died from tuberculosis as they arrived in port and the doctor earned \$60,000. Dr. Adolf Lorenz, the Austrian surgeon, received \$75,000 for going to Chicago and treating Lolita Armour.

The average yearly income of the two hundred thousand medical practitioners in the United States is said to be \$750. If the exceptionally big fees were excluded from the calculation, the average remuneration would probably amount to that of the low paid clergy.

There is sometimes complaint of collusion between family physicians and specialists, the former referring cases to the latter in consideration of a share of the big fee. Dr. Robert T. Morris thinks that the division of the fee between expert and assistants is justifiable if the patient is frankly informed of the fact. All who assist in a case, before and after operation, should "share in receiving dignified compensation for their services."

### **Boston Doctors Attack the New "Emmanuel Movement."**

(From the *New York Herald*, Nov. 29, 1908.)

Boston, Mass., Saturday.—While the so-called Emmanuel movement for the cure of functional nervous and mental diseases, which had its initiative through the efforts of the Rev. Elwood Worcester, rector of Emmanuel Episcopal Church, in this city, is spreading throughout the country under clerical tutelage, this home centre of the idea that combines medical and psychical methods in disease treatment has been shaken by a bitter controversy. Many of Boston's most prominent neurologists, including medical experts who were connected with the movement at the outset, have branded the idea as one to be "thoroughly condemned as an attempt to practice medicine by men who are wholly unqualified to do so."

Among the critics who are severely arraigning the movement are Dr. James J. Putnam, professor of diseases of the nervous system in the Harvard University Medical School, and Dr. Edward Wyllis Taylor, instructor in neurology, and Dr. Philip Coombs Knapp, clinical instructor in diseases of the nervous system in the same school. The Rev. Dr. Worcester and his associates vigorously defend the work, which is being copied by many other churches throughout the country, but the pending controversy threatens to incite widespread discord on the trail of the movement, which treats functional nervous disorders through application of the principles of psycho-therapeutics wherever extension of the plan has penetrated.

The latest bombshell exploded in the wrangle was ignited by Dr. Taylor through an editorial from his pen just published in the *Boston Medical and Surgical Journal*. Dr. Taylor discussed the problem with a *Herald* reporter to-day. He charged flatly that the movement has operated to place the "medical and clerical professions in a false light," to interfere "with relations between doctors and their patients," and to "retard progress in the only direction in which normal psychotherapeutics can grow."

"I am not seeking notoriety," asserted Dr. Taylor, "and for that reason the statement I prepared was given most careful attention. I

do not care to go beyond its lines in speaking for publication with regard to the so-called Emmanuel movement, but I shall be glad to allow the *Herald* to quote what I have addressed primarily to members of my profession."

The statement in question is in part:

"Few irregular movements in medical practice have succeeded in gaining so wide a publicity as this 'movement.' The methods used are claimed to be novel, inasmuch as 'sound religion' is associated with scientific methods in the treatment; medical practice is freely acknowledged, but regarded as insufficient in certain cases; a mystical supernatural element is introduced in which prayer plays an important part; Christian Science is to be attacked in its own stronghold, and finally, the medical profession is to co-operate in the work.

"Certainly the neurologists of this and other communities as a class regard the movement as a mistake and inimical to the best interest of the community at large. Apart from all other consideration we are also convinced that the kind of co-operation which Dr. Worcester supposes he has is an impossibility as a general principle. It is not for a moment to be conceived that this great field of mental therapeutics is to be turned over to the churches, nor is it conceivable that representative medical men will indefinitely stand between the public and the minister to pass on patients which it is their manifest duty to treat themselves. The field is foreign to the ordinary clerical mind and is not a matter which in any large way concerns the churches. If the fate of the churches, as Dr. Worcester implies, depends upon a personal healing ministry in the physical sense, it is surely time that their doors be closed.

"We made no denial that Dr. Worcester and his associates have benefited many individuals; so they did before the movement was started, and so do many others whose names are never heard, both within and without the church. The good the movement does is apparent, the harm it does is fundamental. It places both the medical and the clerical profession in a false light; it raises false hopes; it interferes with the relations between doctors and their patients; it encourages superficiality in the consideration of a great problem; it misrepresents the significance of the psycho-therapeutic movement; it is an abuse to medical charity; it retards progress in the only direction in which normal psychotherapeutics can grow—through the medium of the medical profession."

The extension of the movement which the Rev. Dr. Worcester has encouraged by many public utterances since the assembling of the initial clinic class just two years ago is the centre of the opposition's attack. They affirm that clerics of little or no medical experience apply the methods of treatment involved rather as an "experiment," and that crude hypnotism and religious fear are the implements most widely utilized. Dr. Putnam was one of the chief spokesmen at the time the plan was set under way. He was for many months one of the medical advisers co-operating with the rector of Emmanuel Church. Though discussing the question to-day, Dr. Putnam refused to consent to publication of his views, other than as they were incorporated in two carefully worded statements which he presented.

His formal statement in part asserts:

"While I have high respect for the characters and purposes of its founders I am convinced that the movement is a mistake. It is clear that clergymen, without adequate preparation, are assuming responsibilities of a kind that physicians are not considered qualified to assume until after years of training."

"It is simply ridiculous," asserted Dr. Knapp, "to assume that men without any training beyond a six weeks' course in some theological school which has established a special course in that department of study, or has provided even a few lectures by physicians on the subject of psycho-therapeutics, can deal intelligently or skillfully with the exceedingly complex subject of nervousness and mental diseases, a full knowledge of which cannot be obtained by the study of a lifetime."

### The Burden of "Too Much Eating."

(By Hilda Richmond in *The Interior*, Chicago, November 12, 1908.)

When the tired body could no longer be forced to perform its tasks and the family doctor was called in to prescribe for the wife and mother, the anxious husband inquired what was the cause of the sudden breakdown. The doctor had asked a few questions and ordered complete rest for the patient, and was about to leave when the husband stopped him.

"Too much eating—over-eating," said the busy doctor. "That's the trouble, and it's the trouble with half the women of to-day." "Mary never ate much," said the husband in astonishment. "In fact, she never ate enough, doctor. Look at her thin body! Surely you must be wrong."

"I didn't say she ate too much, did I?" demanded the doctor. "She didn't eat enough, among other sins she committed against her frail body. Look here, Jones, you have four children, all in school, and I'll venture to say they all belong to two or three clubs or organizations of some sort and they all eat. I don't mean the youngsters eat at your own table all the time, but your wife and my wife and the other women of this town have to be everlastingly providing something for them. Then you belong to a lodge or two and a club or two, and your wife belongs to several, and they all eat, and there's nothing doing in church work at present unless there's eating connected with it. Don't I know? Two-thirds of my work seems to be the direct effect—or indirect effect, if you care to put it that way—of over-eating. If the women get together to sew for the heathen there must be refreshments, if a lodge takes in a batch of new members a banquet must be forthcoming, if a woman has an 'at home' afternoon she serves tea, and even the children must be fed if they are together an hour or more after school in the evening. The mothers not only have to provide the food in most cases, but they are the ones who suffer most on account of the deranged stomachs of the family. If the children are peevish and delicate from eating wrong things at wrong times, you can escape to the office, but your wife is shut up with them all day—and all night, too."

And it is alarming when one considers how much eating must be done in order to keep the

social and political and church and lodge life in a healthy condition nowadays. The time was when hospitality was a pleasure, but now it is a burden under which the women are sinking by hundreds every day. The average housekeeper of the land wants to keep pace with the procession and have her children enjoy as many advantages as possible, so she drives her tired body to the work and undertakes tasks far beyond her time and strength. If the neighbors serve refreshments, so must she, and if the neighbors' children have little parties and picnics and taffy scrapes, so must her children. A glimpse at the eating done by the average family away from the family table will show the burden of the mother. Perhaps some months are heavier than others, but usually things are fairly evened up. In winter there are no picnics but more church socials; in spring and fall the social duties are not quite so heavy for the ladies, but the children are busy with their affairs. There are wives and mothers who frown upon clubs and church work and lodges and social affairs, but they are few as compared with the women who feel that they must do their best along all those lines for the sake of their families.

In one home the mother entertained her literary club and served refreshments the first day of the month, which happened to be on Monday. The same week her husband went to a lodge banquet late at night, from which he returned irritable and out of sorts from loss of sleep and heavy food served too late. The children also had a picnic in the woods, and she made sandwiches for the occasion. She and her husband attended a church committee meeting and partook of the cake and coffee served there, and made plans for a chicken supper to be given, nominally by the men of the church, but really by the women, the week following. During the rest of the month she went to a missionary society where refreshments were served, had a few friends in to spend the evening and served refreshments, provided taffy for her daughter's friends, nursed her son through a slight attack of indigestion induced by food purchased by a number of boys to eat at a meeting of the club they had organized, baked cakes for a church supper and helped with the chicken supper, was invited out twice, at both of which times a heavy dinner was served much later than the usual hour, helped with a little party given by a neighbor for her daughter's birthday, and assisted with a charity affair for the poor of the town. And this is a modest record compared with that made by other women. It is eat, eat on every occasion, till one wonders if in time the three meals a day of the family will not be abolished because people have no appetites for them. "We'd all be glad to do away with the useless eating, but we can't do it," said the weary housekeeper. "As it is, we have to do the best we can and hope for better times."

Real hospitality suffers from this excessive eating. Everything is reduced to the give-and-take system, that rigidly keeps account of each entertainment and pays it back as promptly as possible. We cannot ask our friends because "we are not indebted to them," and when we do entertain, we try to take in as many as possible to whom we are indebted, and have it over with. The guest who dares to "drop in" unannounced is a very courageous person, and even near relatives are forming the habit of eating at



hotels and restaurants rather than expect a welcome if they happen to be in time for meals but cannot announce their coming. They have learned that it is the only safe plan. The hostess who uncomplainingly provides wafers and ices for forty persons, dislikes to have a friend drop in without warning at meal time, and few people are guilty of such a thing nowadays. We cheerfully do a wholesale business along the line of hospitality, but will have nothing to do with the retail part of it. In a church of 500 members the committee appointed to find entertainment for over Sunday for the new pastor almost gave up in despair in hunting a hostess. Just as they were about to give up and send the minister to the hotel, one lady came forward with the doubtful statement that she would take him if she had to, but would not be imposed upon again. This sounds strange when one remembers the "Prophet's Chamber" of a generation or two back, when the minister was an honored and welcome guest in almost every home.

Eating between meals and late at night only heaps up trouble for the individual who indulges, and for his family as well. In the days gone by children were supposed to be in bed by eight o'clock and to give their waking hours to school and work and play, but at present the children act very much like their elders. They have their clubs, their social affairs and their church organizations, but the mothers are the ones who prepare the refreshments for all the meetings, and the mothers who nurse them through troubles brought on by too much eating and losing sleep. The woman who takes a cup of tea and a wafer during the afternoon has her appetite destroyed for the evening meal, and the man who drinks hot coffee and eats cheese and rye bread and the various other viands served at "smokers" will surely suffer next day. The overworked stomachs of the present generation are responsible for much of the unrest and lack of enjoyment in life. No wonder foreigners say we take our pleasures sadly. How else can we take them when they are a burden to us? Perhaps we will some day go back to the delightful custom of meeting occasionally without the duty of eating too much, but it is doubtful. However, let us live in hope.

## Thought for the New Year.

But try, I urge, the trying shall suffice.  
The aim, if reached or not, makes great  
the life. *Browning.*

### Worth Repeating and Remembering.

"In two respects the medical profession deserves the grateful recognition and regard of all other callings in modern life. It has always insisted that the practice of medicine is a profession and not a trade. Trade is occupation for livelihood; profession is occupation for the service of the world. Trade is occupation for joy at the result, profession is occupation for joy in the process. Trade is occupation where anybody may enter; profession is occupation where only those who are prepared may enter. Trade is occupation taken up temporarily, until

something better offers; profession is occupation with which one is identified for life. Trade makes one the rival of every other trader; profession makes one the co-operator with all his colleagues. Trade knows only the ethics of success; profession is bound by lasting ties of sacred honor."—President Faunce, of Brown University, in an address before the Rhode Island Medical Society.

### Self-Reliance.

The man who is self-reliant seeks ever to discover and conquer the weakness within him that keeps him from the attainment of what he holds dearest; he seeks within himself the power to battle against all outside influences. He never stupefies his energies by the narcotic of excuses for inactivity. He realizes that all the greatest men in history, in every phase of human effort, have been those who have had to fight against the odds of sickness, suffering and sorrow. To him defeat is no more than what passing through a tunnel is to a traveler—he knows he must emerge again into the sunlight.

Man to be great must be self-reliant. Though he may not be self-reliant in all things, he must be self-reliant in the one thing in which he would be great. This self-reliance is not the self-sufficiency of conceit. No—it is daring to stand alone. Be an oak, not a vine. Be ready to give support, but do not crave it; do not be dependent upon it. To develop your self-reliance you must see from the beginning, that life is a battle you must fight for yourself, you must be your own soldier. You cannot buy a substitute, you cannot win a reprieve; you can never be placed on the retired list. The retired list of life is—Death. The world is busy with its own cares, sorrows and joys, and pays little heed to you. There is but one great password to success—self-reliance.—*Exchange.*

Thank God for the man who is cheerful  
In spite of life's troubles, I say;  
Who sings of a bright to-morrow,  
Because of the clouds of to-day.  
His life is a beautiful sermon,  
And this is the lesson to me—  
Meet trials with smiles and they vanish;  
Face cares with a song and they flee.

—*Anon.*

Let it be resolved, That we strive to carry to every patient a more pronounced spirit of hopefulness and good cheer; to know more about disease, exhausting, so far as we may, every possibility of relief or cure; to search for medical truths and accept them wherever they may be found, regardless of source; to meet our defeats like men and fight our battles with undiminished courage; to hate evil and have no commerce with hypocrisy nor with those who fatten on the misfortunes, the ignorance and the appetites of the weak; to give every man a square deal and demand the same for ourselves; to be kind to all, but especially the unfortunate; and, finally, to dedicate our energies and our talents to the service of our fellow men, aiming to make medicine, as we practice it, so helpful, so efficient, so scientific, that there shall be no abiding place in the communities in which we work, for quackery in any of its many forms.  
—*Dr. W. C. Abbott.*

The unkindness of professional men in their relations with each other is proverbial. Why is this so and particularly as regards medical men? Surely no men have deeper founts of sympathy or friendliness than doctors generally, and few have more kindly or generous dispositions. Some one has said, "Scratch a doctor and you are pretty sure to find a good fellow." But when it comes to analyzing his attitude toward his professional brethren—the less said the better. Perhaps after all it is only competition in professional garb, but to many a man it is hateful, none the less. Many a young physician suffers acutely and has his whole life embittered by the unkindness and hidden meanness of the co-laborers from whom he expected fair, square and generous association. If he is ambitious and tries to get ahead, the more venom meted out to him by his "colleagues." If he is successful, the more assiduously his professional brethren wield the hammer. Most of it is "absent treatment," and while rarely detrimental in the sense of affecting his material fortunes, it does destroy the charm of his vocation and hurts him as a man. It is not right. Every doctor knows the difficulties and hardships of medical practice.

If every man's inhumanity to man is exemplified it is to the doctor. Too often his only fee and reward is ingratitude. All this the physician knows, and it ought to bring him closer to his co-worker, and make the vaunted fraternal spirit less the hollow sham it is. Maybe it will some day, but sometimes it seems a long way off.—*American Medicine.*

(This strongly sets forth a condition existing, we are glad to believe, less frequently now than formerly, and we hope will be of rare occurrence in the years to come. There are some instances where the "young physician" has, in commencing practice in a community, assumed an attitude of superiority toward the older practitioners and resorted to unethical methods, and has suffered for his indiscretion and wrong-doing. But the true physician is a gentleman of generous impulses, and the kindly, helpful spirit characterizes his dealings with all, especially the younger, professional brother, and that spirit is growing.—Editor.)

Again I say, more air, more sunshine and more pure water in the homes of the poor. Surely, those who never have an opportunity to escape during the heat of summer to the green fields and the pleasures of the open air, are entitled to a generous share of the blessed cheap necessities to right and happy living.—*Howard A. Kelly.*

#### **Dr. C. A. L. Reed, of Ohio, for the United States Senate.**

In every way Dr. Reed is well equipped for the great office to which he aspires. Quick, keen and able, he is possessed of a charming personality that is admirably balanced by the highest sense of honor and principle. A fluent speaker, a deep thinker, above all he is an optimist. A glutton for work, he is indefatigable for any cause that elicits his sympathy or interest. No man before the people to-day better exemplifies Senatorial ideals than Dr. Reed, and it is certain that his election will mean much, not only to his State, but to the whole country.—*American Medicine.*

#### **Priest and Physician.**

Rev. A. B. Conger, Rosemont, Pa., in an article in the *New York Medical Journal*, November 14th, referring to the relation of the priest with the patient in the matter of spiritual confidence, and the duty of the physician not to throw obstacles in the way thereof, says: "Suppose some one says 'I do not believe in this.' I answer that so far as the psychotherapeutic value of the sacrament is concerned that makes no difference, if the patient does. His restoration to health is what you aim to achieve. And the relief to his nervous tension is accomplished by his belief, not yours. And so on every ground it seems to be the wisdom of the physician to send such patients to the priest or the priest to the patient."

#### **Typhoid Fever in Reading, Pa.**

A serious epidemic of typhoid fever has been reported from Reading, Pa., where over four hundred persons are said to be ill of the disease. The Pennsylvania State Board of Health has been called upon to aid in overcoming the epidemic, which is thought to be due entirely to the unfiltered and unwholesome water furnished to the city from Maiden Creek.

#### **Revision of International Classification of Causes of Death.**

The second decennial revision will take place next year, largely to facilitate its use in connection with the mortality statistics of the United States census for the year 1910. The profession generally should co-operate so that the results of the revision may be satisfactory. The present system may be examined in the annual reports on mortality statistics published by the Bureau of the Census as well as in the registration reports of many States and cities. A copy of a pamphlet on "Relation of physicians to mortality statistics" containing an outline of the classification will be sent by the Director of the Census to any physician on request; and the Director will receive any suggestions for the revision and will submit them to the appropriate committee and the International Commission.

#### **Institution for Feeble-Minded and Epileptic.**

The Eastern Pennsylvania Institution for the Feeble-minded and Epileptic at Spring City was officially opened on November 16. The plant has been in course of construction for two years and is only partially completed. Seven buildings are ready for occupancy and three more are about ready for acceptance by the State. The plans provide for an ultimate group of 23 structures, whose early completion is looked for. Some \$350,000 has already been expended on the buildings and the total cost will be about \$1,000,000. When finished the institution will accommodate about 1,000 patients. Dr. Henry M. Weeks has been selected as superintendent.

(Dr. Weeks was for some years a member of the Somerset County Medical Society and the efficient superintendent of the New Jersey Epileptic Village. We congratulate him and the institution that has entered upon its good work.—Editor.)



### Will Not Prescribe Liquor.

At a meeting of the Hancock (Ohio) Medical Association, November 17, a resolution was adopted that no member should give a prescription for liquor excepting at the bedside of patients, and then only in case of extreme urgency.

### Faculty Changes at Columbia.

Two retirements from the Faculty of the College of Physicians and Surgeons, Columbia University, New York, have just been announced. The Professor of Physiology, Dr. John G. Curtis, and the Professor of Pathology, Dr. T. Mitchell Prudden, have resigned to take effect on July 1, 1909. Professor Curtis is the senior member of the Faculty, his connection with the college dating back to 1870. Dr. Prudden was appointed the first professor of pathology in 1897, his connection with the college having begun in 1878. These able professors, after long and faithful service, are entitled to the rest and honorary position that the college will grant them.

### The Clinical Society of the Oranges.

The Clinical Society of the Oranges was organized November 5, 1908, with six charter members—Drs. J. K. Adams, C. W. Buvinger, S. A. Muta, E. W. Riggins, L. H. Smith and W. H. A. Warner. The object is to study therapeutics and clinical medicine and surgery. Dr. Leonard H. Smith was elected president and Dr. Charles W. Buvinger secretary and treasurer.

### The Newark Medical League.

Dr. Wilhelm Karo, of Berlin, one of the German representatives at the recent International Congress held in Washington, D. C., delivered a lecture on "Tuberculosis of the Bladder," before the profession of Essex County, under the auspices of the League, at the Continental Hotel, Newark, November 23, 1908. Drs. E. J. Ill. Beling, O'Crowley, Epstein and Seidman took part in the discussion which followed. On December 14th Professor E. W. Scripture, M. D., of New York, delivered a clinical lecture on the "Treatment of Stuttering and Stammering." There were twelve patients present for demonstration. Drs. Hicks, Beling and Wrightson took part in the discussion.—Reported by Dr. L. Weiss, Secretary.

### German Hospital, Newark.

At the annual meeting held December 16, 1908, the six directors whose terms expired were re-elected. The treasurer reported a cash balance on hand of \$639.43, besides \$8,000 in bonds, as the nucleus of a \$50,000 fund for the support of the hospital.

Dr. Edward Staehlin, head of the medical staff, reported 3,769 old cases and 1,079 new ones were treated during the year by the clinic. The patients in the hospital for the year numbered 795. There were 77 births in the hospital and 79 deaths. Three hundred and twenty-five operations were performed.

### Harvey Society Lectures.

The remaining three lectures of the fourth course of the Harvey Society under the patronage of the New York Academy of Medicine will be delivered as follows:

January 9, 1909—Professor J. B. Leathes, of The Lister Institute of Preventive Medicine, England, on "The Relation of the Liver to the Metabolism of Fat."

February 6—Professor Philip Hanson Hiss, of Columbia University, "Some Problems in Immunity and the Treatment of Infectious Diseases."

March 6—Professor C. B. Davenport, Station for Experimental Evolution, Cold Spring Harbor, on "Heredity in Man."

### Essex County Society Lectures.

The next lecture before the Essex County Medical Society will be delivered on Tuesday evening, February 2, 1909, in the hall of the Free Library, Newark, at 8:30 o'clock, by Dr. Haven Emerson, of the Laboratory in Physiology, College of Physicians and Surgeons, New York City. Subject: "Laboratory Teaching in Physiology as it Bears upon the Medical and Surgical Practice."

### New Members of County Medical Societies.

(Reported since the State Society annual meeting.)

Camden County—Griscom, L. Eaton, 604 Broadway, Camden; Knowlton, William W., 620 Benson street, Camden.

Cumberland County—Cornwell, W. Leslie, Bridgeton; Spence, George S., Leesburg.

Essex County—Amory, George B., 662 High street, Newark; Bowman, T. Floyd, 30 Union avenue, Irvington; Davis, Lester R., 58 Elizabeth avenue, Newark; Epler, Dow Agard, 82 Congress street, Newark; Finkelstein, Abraham, 262 High street, Newark; Kaufhold, Frank, 589 Clinton avenue, Newark; Keller, Sidney C., 166 Washington street, Newark; McCartie, Daniel B., 93 Fourth avenue, Newark; Martine, Frank L., 256 Clifton avenue, Newark; Mockridge, Oscar A., 244 Belleville avenue, Newark; Oberle, William A., 27 Darcy street, Newark; Robinson, Louis Henry, 587 Bergen street, Newark; Satchwell, Harry H., 99 Frederick street, Newark.

Hudson County—Brown, Henry W., 62 Kensington avenue, Jersey City; Feury, Frederick N., Secaucus; Schuck, Tranggott J., 1020 Hudson street, Hoboken; Spaulding, Henry J., 512 Fulton street, Weehawken.

Middlesex County—Illes, Bela G., 155 Bayard street, New Brunswick.

Ocean County—Chard, Marie, Lakewood; Lewis, Stewart, Lakewood.

Names with dues\* should be promptly sent to Dr. Chandler. Dues sent before December 1st, \$2, entitling to back numbers of Journal from June. After December 1st, \$1, entitling to Journal from January 1st, 1909. Members are not in good standing, nor are they eligible to membership in the A. M. A. until these dues are paid.

# THE JOURNAL

OF THE

## Medical Society of New Jersey

JANUARY, 1909

*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 252 Main Street, Orange, N. J.*

### OUR GREETING—1909.

The editor sends greetings to every member of the Medical Society of New Jersey, wishing him or her in personal, home and professional life and work a very

### Happy New Year.

May we ask the careful reading and, as far as you can approve, the adoption and observance of the Resolves for the New Year. If there is anything any member cannot endorse, or if they wish to add suggestions for the betterment of the State and county societies, the Journal and of individual service, kindly let the editor hear from you.

While there is much to be thankful for in the retrospective view of the year 1908 in the progress of our science and the pleasure of association in scientific work; in helpfulness to our fellow men and in fellowship with each other; there is much to cause sadness, not only in contemplating the failures to use our opportunities to the best of our ability; but in the great losses we have sustained.

We have been called to part with three of our fellows—ex-presidents of our State Society—Drs. John C. Johnson, William Elmer and Elias J. Marsh, men of high personal character and decided profession-

al ability. We miss many others whose loss has been deeply felt in their respective communities. And we, with the profession at large, mourn the loss of such eminent men as Drs. Senn, Shrady, Flint and McCosh, whose deaths occurred when doing their best work with the prospect of still greater contributions to scientific progress; especially do we lament the tragic close of the lives of the two last mentioned, by accident.

We turn to the New Year with hope and confidence, trusting in a kindly Providence, and looking for great advance in the sciences of our profession, and growth, improvement and success in professional life in its diversified activities.

### RESOLVES FOR THE NEW YEAR.

That it shall be the best year in the history of the Medical Society of New Jersey, with the best annual meeting ever held. The latter means a great deal when we remember that the American Medical Association will hold its annual meeting this year at Atlantic City during the first week in June, and we will hold our meeting during the last week of the same month at Cape May. It has been said that our members will not attend both. Why not? If not, let us be loyal to our State Society, and see to it that every county society has at least a full delegation present. Elect only delegates who will agree to attend or have a substitute there. The National Association is sure to have a tremendous attendance. Let every one of our members who can plan to attend its sessions. Listen to the great number of papers that will be presented; you will probably have a severe attack of mental dyspepsia and will need to come down to Cape May to rest and live for two or three days on a more moderate diet.

Our Committee on Scientific Work is actively at work planning for the annual meeting. (See Dr. E. J. Marsh, the chairman's, communication in another column.) Let there be a generous response in offering papers; begin their preparation early



and give them your best thought, clear-cut, condensed, practical and, as far as may be, original thought. Don't forget the prize essays; with a good subject, let us have several competitors. We have begun early to call your attention to the annual meeting as resolve number one. We do not propose to let you forget it.

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Resolve Number Two: That it shall be the best year in the history of our component (county) medical societies. And success here means better, fuller life and power in our State society. It gives us great pleasure and satisfaction to record the past year as one of decided progress in most of the county societies. We suggest that an earnest effort be made to secure the enrollment of every legally qualified practitioner, who ought to be on the roll, in every one of the respective counties. Many of the county societies have adopted the post-graduate course; others are making the report of clinical cases the leading feature of the meetings; some have a special paper presented by a prominent outside practitioner or one of their own members with discussion following. All these methods may be made interesting and profitable, and a change of program from one method to the other is often best, but whatever the methods adopted, resolve to put thought, life, harmony, helpfulness in the meetings and rouse the esprit de corps of the membership. An occasional social meeting with the members' wives and daughters present, and an intervisitation by delegates from adjoining county societies have in some cases contributed to the ends mentioned.

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Resolve Number Three: That it shall be the best year of the Journal of the Medical Society of New Jersey. We spoke modestly in our last month's issue of its improvement during 1908, and we thank the many who have spoken kind words expressive of that opinion; this year we shall still more appreciate kind deeds—help us

in our efforts to make it still more worthy of commendation. We confess it yet comes far short of our ideal. Our strong belief is that the Journal should far more fully set forth the good work the physicians and surgeons, general practitioners and specialists, of New Jersey are doing. Many practitioners in the great cities opposite the northern and southern ends of the State have achieved national reputation on account of the grand work they have done, and justly so; but we dare to express our conviction that many of our New Jersey practitioners are doing as good work in a quiet way, especially in our hospitals. The editor is not ubiquitous and cannot know of the vast majority of cases worthy of report in our columns unless they are communicated. Can we not have condensed reports of hospital work with cases of special interest more fully reported? We have spoken under resolve number two of the county societies; for their good and the Journal's success we wish more prompt and full reports of their meetings, with any specially valuable papers and outlines of others sent to the editor. Let the secretary and the reporter arrange who shall send them; as the former is always supposed to be present and keep the records, it may be best for him to do it, but let us have them from some one; also the full names and addresses of all newly elected members and very prompt reports of deaths with obituary notes. If the secretary forwards reports referred to we shall still expect frequent communications from the reporters, of local society meetings, personal notes and other matters of special interest to the profession occurring in his vicinity or other parts of the county. One other very important point concerning the Journal we refer to under the next resolve.

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Resolve Number Four: That it shall be my best year's work—each member making this his own personal resolve. Here after all said is the secret of the greatest possible efficiency and success of the Journal, the county medical society and the

State society, as each member, throwing aside all selfishness and indifference, shall recognize his obligation and his individual responsibility for their success.

As to the Journal: The chief points we emphasize is, that it is not a personal organ for which the editor is chiefly responsible. Every member has an interest in it and should use it to the best of his ability in the advancement of scientific knowledge and the development of the standing, influence and power of the Medical Society of New Jersey. We appeal to our members to lay aside undue modesty and take time to prepare and send to the editor clinical reports of interesting cases in their hospital or general practice work, for the good of their fellow members and the credit of the profession in the State of New Jersey; also that they freely use our correspondence columns in which to discuss the important business, legislative or scientific problems that affect the profession or the public.

As to the County Society: Resolving to attend its meetings, if not to receive benefit, to show your interest and help your fellow members, by contributing towards its scientific work and endeavoring in every way to harmonize and unify the profession and thus increase its influence and power in guiding legislation, bettering health conditions and winning public respect and confidence.

As to the State Society: Zealously guard its high standing and dignity, keeping it true to its past traditions in maintaining high standards of medical education and licensure and in its zeal for the public health and the safeguarding of the sacred interests of the wards of the State in her public institutions. Let the influence of every honorable member be exerted to keep out or defeat every unholy personal scheme and every petty political method and to exalt righteousness, justice, truth and manly courage in all our councils.

## NEW JERSEY DAY.

### International Tuberculosis Exhibition.

New Jersey Day was well observed on Wednesday, December 17, by a large and deeply interesting meeting held in the Auditorium Hall of the American Museum of Natural History, New York City. The physicians of New Jersey and lay workers of the New Jersey Society for the Prevention and Relief of Tuberculosis were there in large numbers. Governor J. Franklin Fort presided and practical addresses on the various phases of work and of the progress made in the campaign against tuberculosis were made by Bishop James A. McFaul, of Trenton; W. C. Smallwood, executive secretary of the State Association; Mrs. Emily Williamson, president of the Charities Aid Society of Elizabeth; Drs. B. V. D. Hedges, of Plainfield; H. H. Davis, of Camden; B. S. Pollak, of Jersey City, and others. The very extensive international tuberculosis exhibit, occupying an immense amount of space in the Museum building, is attracting hundreds of thousands of visitors. It is proving a mighty factor in advancing the educational feature of the anti-tuberculosis campaign.

### SCIENTIFIC RESEARCH.

The editorial in the November 28th issue of the *Medical Record*, entitled "Absurdity in Research," which will be found on page 425, is worthy of our readers' careful perusal. The zeal of some investigators in our profession seems to be in danger of running away with their good judgment. The ambition of medical men to make discoveries that shall greatly advance the science and art of medicine is highly commendable provided the sacred interests of humanity are not imperilled by an undue zeal which subjects the patients experimented upon to needless and hazardous risks. While every true lover of humanity, who appreciates the value of human life and justifies every proper effort made to save and prolong it, is a believer in animal experimentation when done without the infliction of unnecessary pain; when it comes to experimenting on human beings the greatest care should be exercised in differentiating between the justifiable and unjustifiable methods of pro-

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Just as we go to press we are sorry to hear that our secretary, Dr. W. J. Chandler, had a bad fall, fracturing two ribs.



cedure in the pursuit after the deeper secrets of scientific knowledge.

With the knowledge we now have of comparatively recent discoveries, such as anaesthetics, diphtheria antitoxin and other serums, while they are not without danger, the results obtained have abundantly justified their proper use in our endeavors to give comfort and relief to our patients and to save human life. But when it comes to subjecting one of the most delicate and important organs of the body for testing the effect of tuberculin, not as a curative measure, but only as a corroborative means of establishing a diagnosis, we should have a care that recognizes the dangers and acquaint our patients with all the facts concerning its danger. As the writer of the editorial referred to says: "Concerning the desire to figure in literary discussions and to be among the first to try every newly recommended procedure must not overcome his sense of duty to the patient and consideration for the health and comfort of the latter."

Let a just, conscientious regard for the sacredness of human life and the good name of our profession be ever the guiding principles in all our investigations into the deep problems and hidden mysteries that still await solution.

One writer who claims to have had much success in the use of the ophthalmotuberculin reaction test, gives 84 negative results in 202 cases, and at the end of his article gives the following as two of his many conclusions: (1) A negative result does not exclude the possible presence of tuberculosis; (2) the test should not be resorted to if the diagnosis can be made by physical signs and symptoms. He had before conceded in his paper that "too little work has yet been done to establish the exact status, limitations and dangers of the test." It is generally conceded that there is almost invariable failure in military tuberculosis and in cases where the lesion is inactive. Dr. Gorlich, in the *Muen-*

*chenh Med. Wochenschrift*, June 30, 1908, says there is a great deal of danger in its use and he does not consider that the test is one which should be recommended to the practicing physicians.

Dr. Elenbeck, of Berlin, applied v. Pirquet's test to 232 infants and got a positive response in only 5, and he reports tuberculosis as having been found in several of the 20 infants who died after a negative reaction. Drs. Latham and Inman, in the *London Lancet*, say: "Tuberculin is a dangerous drug and its administration requires considerable experience. It is capable, when given improperly, of producing disastrous and even fatal results."

In view of these opinions by eminent men, who have had large experience, is it not subjecting the patient to too great a risk to use the ophthalamo-tuberculin reaction test, especially when its diagnostic value is as unreliable as the figures quoted seem to indicate? If used the utmost care should be exercised especially in securing the best quality of tuberculin and using it with a faultless technic.

### STATE SANITARY ASSOCIATION.

The thirty-fourth annual meeting of the New Jersey Sanitary Association held at Lakewood, December 4 and 5, 1908, was one of the best of the series. There was a large attendance and the papers presented were of more than average interest and practicality. Although it was the year especially devoted to the consideration of the science and art of the civil engineer—the president being one of the prominent workers in that department of sanitary administration—yet the medical men were much in evidence, a large number of them being in attendance, and their contributions were among the most valuable of the series of papers presented, and they were generally recognized as the proper leaders in all efforts for the prevention of disease and the proper, logical guardians of the public health. The tenor of some of the papers and the trend of some of the discussions were decidedly in that direction.

This association during the last two years seems to have taken on new life, is growing in numbers, over sixty new members having been elected at this year's annual meeting. The absence of some of the ablest workers and oldest members was noted with regret, among them Dr. Henry Mitchell, Dr. G. K. Dickinson and Dr. Elias J. Marsh, Sr., the latter having died during the past year, and the association adopted a resolution expressive of their sense of loss in his departure. We shall give insertion in subsequent issues of our Journal of some of the papers read before the association. Elsewhere in this issue will be found a fuller account of the meeting.

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Dr. John L. Leal, of Paterson, in his paper before the Sanitary Association on "The Necessity for Schools of Instruction for Public Health Officers," emphasized the importance of the executive officer of health being a physician. Among the many excellent points in his paper he says:

As sanitary science, or public hygiene, or public health is the science of the prevention of preventable disease and the spread thereof to the public, and as the science and, indeed, the only science which has to do with the knowledge of such disease in its various manifestations, is the science of medicine, it seems to me that the position of executive officer of health, and all positions in which such disease is directly dealt with should be filled by physicians. \* \* \* Individual physicians have all ways realized the equal importance of their two-fold functions—First, the prevention, and, second, the cure of disease. Sanitary science had its birth in this realization of individual physicians, and by their investigations and labors it has been brought to its present standing."

After dwelling at some length upon the theories and work of representatives of other professions and of laymen in various departments of public sanitation, he argues forcefully that the executive head of any department of health, of importance, should be a medical man, and that the subordinate officer who comes into immediate contact with disease, or fulfills functions requiring medical knowledge, should unquestionably be a physician. We will give Dr. Leal's paper in full in the next issue of the Journal.

Mr. William C. Smallwood, the able and efficient executive secretary of the New Jersey Society for the Prevention and Relief of Tuberculosis, in his address before the State Sanitary Association, laid special emphasis upon the point that the physicians are the proper leaders in the great work in which that organization is engaged—in endeavoring to stamp out tuberculosis, and that that conviction has led to the association's change of method, in seeking now to enlist the county medical societies, and have them take the lead in this movement in the different counties.

We will not, at this time, further dwell upon this question, except to ask: If this voluntary association, composed largely of non-medical men and women, banded together with a common desire to benefit humanity in the attempt to stamp out this great scourge, has been compelled, by common-sense reasoning—leading to the conviction that a little learning is a dangerous thing, and that the best medical knowledge is essential—to place the leadership of this great movement in the hands of the only men who have studied and understand disease, what shall be said of putting the official State work of prevention and control of disease in the hands of non-medical men—practically the old sewerage commission, which had not a medical man on it? The only medical man appointed on the present State Board of Health, we are informed, has not been in the active practice of his profession for ten or twelve years, had not given special study to sanitary science and had been without practical experience in sanitary administration! He is an estimable man and will make an able member; but our point is that two more medical men who were trained sanitarians should have been appointed.

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#### ATTENTION, PLEASE!

Special attention is called to the communications from Drs. L. M. Halsey and E. J. Marsh, on page 423, and to the Prize Essays Announcement, page 423.



We acknowledge with thanks the receipt from the secretaries of county societies of reports on interesting cases made by Drs. C. J. Kipp, of Newark, and P. Boysen, of Riverton; also papers on the following subjects: "Salpingitis," by Dr. J. W. Martindale, of Camden; "Diagnosis and Treatment of Sarcomata," by Dr. J. Tomlinson, of Bridgeton; "Acute Chorea," by Dr. C. H. Scribner, of Paterson; "Differential Diagnosis of Tumors of the Breast," by Dr. E. J. Ill, of Newark, and "Modern Urological Diagnoses," by Dr. G. N. J. Sommer, of Trenton; "Psycho-neuroses of the Motor Car," by Walter Dodge, M. D., Orange, and "Pediatric Dents," by K. H. Goldstone, M. D., Jersey City. We will give them as early insertion in the Journal as possible.

As referred to elsewhere, we desire reports from the secretaries of all local medical societies in the State. Dr. A. P. Hasking, the efficient secretary of the Hudson County Society, informs us that there are five or six such societies in that county. Gentlemen, we believe your work is worth reporting; will you kindly let us hear from you? You may thus help yourselves in stimulation to better work and lead others to "consider one another to provoke unto love and good works."

We did not wish to begin the new year with apologies, but the necessary change of office of publication has caused delay in issuing this number of our Journal, and will account for any errors. As much of the matter in medical journals is of technical character, it requires a little time for the typesetter to attain speed and proficiency in his work.

The medical profession needs honest, unbiased medical journals. It has learned that to have them it must pay for them, and conduct them for itself. It is a cause for rejoicing in the profession whenever a medical journal is established on a basis that will keep its pages free from the undue influence of the manufacturers of medical preparations.

Numerous as the journals conducted by Medical Societies have become, the possibilities of this kind of medical journalism

are still imperfectly appreciated. We are reminded of what may be done in this direction every time we see the *Journal of the New Mexico Medical Society*. This society, with only two hundred and twenty-one physicians in the Territory to draw upon for its membership, has sustained its neat quarterly journal now for three years, without once staining its pages by the admission of the unethical advertisement, or the tainted reading article. It puts to shame the disgraceful "organs" or "official journals" of some of the older larger State medical societies.—E. J., in *Colorado Medicine*.

We give this insertion in our editorial columns and emphatically endorse the sentiments expressed.—Editor.

The editor was somewhat surprised on receiving the *A. M. A. Bulletin*, to find in the directory of State society journals and their editors, which was given as "correct to date"—November 15, 1908—the name, as editor of this Journal, of a gentleman who, though prominently connected with it, has never held that position. We refer to it with no desire for prominence, but because it is embarrassing to others as well as to the editor, in editorial correspondence, in our right of exchange and of membership in the National Medical Editors' Association.

EDITOR: D. C. ENGLISH, M. D. NEW  
BRUNSWICK, N. J.

We remind our readers again that all communications referring to business connected with the Journal—subscriptions, advertising, reprints, etc.—should be sent to the Publication Committee, 252 Main Street, Orange, N. J. Dr. W. J. Chandler, South Orange, Chairman. Only scientific papers, reports of meetings and other matter suggested for insertion in the literary department of the Journal and personal communications should be sent to the editor.

Pseudo-psychiatry, under its many disguises, religious and irreligious, is the natural child of modern no-medicine medicine.

What is the well-educated practitioner who becomes a therapeutic agnostic or negative, and takes fees for something he does not believe in and feels he cannot deliver?

## PRIZE ESSAYS.

These prizes were instituted by the Medical Society of New Jersey at the annual meeting in 1905, and are open for competition to the members of the Component County Medical Societies.

The subject chosen this year is:

THE SYMPTOMS, ETIOLOGY, PATHOLOGY AND TREATMENT OF EXOPHTHALMIC GOITRE.

Each essay must be signed by an assumed name and have a motto, both of which shall be enclosed in a sealed envelope, containing the author's name, residence and component society.

The essay shall contain not more than 4,000 words and must be characterized by originality in investigation and thought, and by clearness and conciseness of expression, and be, in the judgment of the Committee, of decided value to the members of the Society and to the profession generally. Failing in these respects no reward will be made.

The essays, which must be type-written, with the sealed envelope, must be placed in the hands of the committee on or before the first day of May, 1909.

The Committee will select the first two essays in order of merit. To the first will be awarded the prize of one hundred dollars, to the second fifty dollars.

The unsuccessful authors will receive back their essays upon their identification to the chairman of the Committee. The successful essays will be the property of the Society and will be published in the Journal.

CHARLES T. KIPP, Newark, Chairman.

DAVID C. ENGLISH, New Brunswick.

STEPHEN PIERSON, Morristown.

Committee.

## Correspondence.

(From the Committee on Legislation, Luther M. Halsey, M. D., Chairman.)

Dear Dr. English:

The Committee on Legislation desires to call the attention of the profession to the activity of the Osteopaths. They commenced their work in September, before the primaries were held. Within the past ten days a prospective bill has been placed in the hands of every member-elect of the Legislature. The osteopaths have requested comments on it—where it should be modified and if the member will vote for it.

Let us get to work. The Committee on Legislation of the various county societies should interview their representatives at once and report to the chairman of the State Society Com-

mittee. Do not lose any time. This is very important. Have your members see the legislators at their homes and explain to them the whole matter. The osteopaths' proposed bill is more vicious than their past measures. Let us all work and try to give them a more crushing defeat than ever before.

L. M. HALSEY,  
Chairman of Committee.  
Williamstown, N. J., Nov. 24, 1908.

## From the Committee on Scientific Work.

Dear Dr. English:

Will you please call the attention of the members of the Medical Society of New Jersey, through the Journal, to the fact that the Committee on Scientific Work will be glad to hear from any one who wishes to present a paper at the annual meeting at Cape May next June.

As the committee has decided to limit the number of papers on the program, it reserves the right of selection, but will be glad to receive any offers.

Very truly yours,

E. J. MARSH, Chairman.  
Paterson, N. J., December 12, 1908.

## Editorials from Medical Journals

### MEDICAL BANQUETS.

(From the *Maryland Medical Journal*, December, 1908.)

It is perhaps not fitting that the Journal should take a stand for prohibition, local option, high license, total abstinence, or any of the disputed cures of a wholesale nature for evils which proceed from unwise or vicious excess in the use of intoxicant alcoholic drinks. The medical press should respect the thoughtful convictions of each one of its constituents. The editorial page above all the others should be known for its broad judicial view of any disputed subject, taking the "middle way," or presenting fairly both sides.

There are, however, some subjects of which there are not two sides. Some things are right beyond dispute; some things are wrong beyond dispute. One of these subjects is that the profession, wherever acting in an organized capacity, should promote that which is normal and frown upon all excess. Just when conviviality becomes excessive it is difficult to say. Lines of social conduct are confessedly hard to draw. The recent lay banquet of men and women in high society which is reported to have had as a feature a mock confinement case with delivery may well be considered disgraceful. A like condemnation must, in all thoughtful minds, be attached to a medical banquet where a considerable number of the guests become evidently drunk before its close.

The Journal does not undertake to furnish a diagnosis of drunkenness nor to instruct committees how to proceed if it occurs. We simply record a protest against a growing license in these respects at the banquets of some of our greatest and most influential medical associations, whose efforts to raise the ethical standards in other respects are worthy of highest commendation.

All we ask is that an honest protest should receive careful attention. We do not give



names or cite occasions, but we can, if desired.

Time was when drunkenness in the doctor was considered a minor fault. "Old Doctor X had more sense when drunk than all the other doctors sober," was a frequent comment. This is now a thing of the past. The time will come when graduation banquets and alumni suppers will be still more closely guarded than at present in these respects, and when a class reunion cannot safely be transformed, as we have recently seen, into a brutal alcoholic orgy. This editorial is not starting a "temperance crusade." We do not propose to continue the subject nor to enter into disputations. We ask simply for greater caution in the future banquets of our ancient and noble profession in Maryland, which has of late made such exemplary advances along so many lines.

### HASTE IN ADOPTING NEW THINGS.

(From the *Kansas Medical Society Journal*.)

Are we not too easily influenced in adopting the "new" things in medicine? For instance, in anaesthetics many have cast aside ether anaesthesia for scopolamin—morphin—cactin, when the percentage of deaths from the former has been proven by Woods to be but one in 16,000. The same author has proven that the mortality in the latter has been one in 300. There may be instances when scopolamin-morphin-cactin anaesthesia is preferable, but it is safe to assume that it will not supplant ether. This is also true of the spinal injection of tropo-cocain. There may be a few instances when it is advisable, but it is hardly probable that it will reach the universal usage that ether or even chloroform has. There is another fad that had an almost unprecedented run. It was an intestinal antiseptic purported to be many times stronger than corrosive sublimate, yet when taken into the system was harmless except as to its bactericidal powers. It was supposed and exploited to be almost a specific for typhoid fever, and attained enormous success as to sales but clinically was a failure. Let us be conservative in medicine as well as surgery. This is not meant to carry the idea of non-progressiveness. There is plenty of room for every good, new idea, no matter whether in medicine or surgery.

### THE FOUNDATION OF ETHICS.

(Editorial from the *A. M. A. Journal*, November 28, 1908, with communication from Dr. J. D. Bryant.)

The reinstatement of ethics as an essential constituent of all practical social and business relations moves onward. Business organizations are beginning to realize that without a general adhesion to sound principles of right conduct commercial anarchy must ensue. The basic idea of this proposition was clearly grasped and enunciated at a recent dinner of the Chicago Business Science Club. "It is well," said one speaker, "to strike at the serpents of greed and graft wherever they show their heads, but that is not enough; we must kill not only the serpents but their eggs, we must destroy their seed. In a few years all of us will have been replaced by the generations now in the public schools. We must get back to the public schools to inculcate the science of right conduct

in business." Here lies the root of the matter. It is in education—that is, not mere instruction in the facts of history, geography, science, mathematics, languages or what not, but in character building—that the justification is to be found of the saw, "The child is father of the man."

The proper preparation of the young man to fit him in all respects for the pursuit of his future career is of prime importance in the case of medicine. The relations of the medical man to the public are so peculiar, so much more intimate than the relations of other classes of men to the public, that a sound ethical training should take the first place in the equipment of the medical student. Religious education of any kind always includes the principles of ethics. The secularization of the schools which accompanied the establishment of the public school system, while doubtless as right as inevitable on general principles, carried with it the disadvantage of the exclusion of systematized ethical training, and no general steps have been taken to remedy this deficiency by the institution of definite ethical courses.

In like manner the abrogation of the practice of preceptorship from medical education has eliminated a practical training in that important part of the profession of medicine, the social relations of the practitioner with the public and with his individual patients. It is essential that partially to remedy the defect in medical training arising out of the discontinuance of the system of apprenticeship under a preceptor, the formal study of ethics as applied to medicine should have an important place in the medical curriculum. While the place of the preceptor cannot be filled by the medical college, every effort should be made, not only to inculcate ethical ideals, but also to impress on the medical student the fact that success in medicine does not depend alone on exact diagnosis and successful treatment, and that in practice he will have to treat patients, not "cases."

New York, Nov. 16, 1908.

To the Editor: I am repeating this season the course of instruction in the Principles of Medical Ethics, which was received with enthusiasm by the members of the graduating class last year. Only two or three sections of the booklet are considered at one time, and this after the completion of a lengthy conference on practical surgical topics. The same enthusiastic interest is displayed now by the students that characterize the last year's course. The students are anxious, indeed, for copies of the Principles of Medical Ethics, so that they may be able to follow the instructions with greater advantage to themselves, for obvious reasons. I, therefore, request that you will send me for use a copy for each member of the graduating class. It is much better to place them thus early in hand than to wait until after graduation. This course of action is so obvious as to need no further remark. As soon as suitable progress is made in this manner I will again request of the students individual queries bearing on medical ethics which may occur to them to make. No doubt the illuminating experience in this regard which developed further need for this deviation in the manner of instruction last term will be equally manifest again. I hope that all other institutions engaged in medical instruction will see the need of this ennobling activity and accordingly enter on it. It is far better, it seems to me, to

start aright in this field of professional adornment, with early success, than later to labor harder with a comparatively disappointing outcome. In any event, I am anxious that the medical man graduating from the college which I have the honor to represent shall be afforded the opportunity to become as gracious and just in manner and method as he is equipped in professional attainments.

JOSEPH D. BRYANT.

### ABSURDITY IN RESEARCH.

(Editorial in the *Medical Record* Nov. 28, 1908.)

We believe that the majority of the medical profession does not look with favor upon such uncritical attitude toward new methods in medical art and science as has been displayed, for instance, in connection with the conjunctival reaction to the instillation of tuberculin. Whatever may prove to be its final value in the recognition of cases of tuberculosis not diagnosed by the older methods of procedure, it was self-evident from the start that the use of the conjunctival membrane for testing the effect of tuberculin must be connected with grave danger to the patient, a most delicate and most important organ of the body being exposed to injury or destruction by an unexpected severity of the reaction. Yet current medical literature was flooded for a time with papers recounting so and so many healthy and diseased persons upon whom the reactions were tried, even though the very first publications showed that to be of scientific value such work had to be done in institutions where the opportunities of verifying the clinical diagnosis by pathological examinations were frequent, where time and means were abundant to carry out the older methods of diagnosis properly, and where it was possible to follow the patient carefully so as to institute immediate treatment if the reaction was becoming dangerous to his vision. It is true that the unfortunate results reported have been few in comparison with the great number of tests made, but it is probable that many cases have not been made public; moreover, it must be remembered that the reaction in question is simply a means of corroborating a diagnosis and not in the least a method of treatment or, by itself, an indication of treatment. We doubt whether the presence of the reaction alone would justify a course of treatment for tuberculosis in the absence of other signs of the disease. Of course, many methods of treatment are accompanied with possible danger of injury or even of death. Collapse after the injections of antitoxin, death caused by anesthetics, deaths due to shock of operative procedures are instances of this kind, but the patient is usually well informed as to the possibility of such accidents and considers the risk worth taking in the attempt to get rid of a serious disease. That the great majority of patients on whom the ophthalmoreaction was tried were kept in ignorance of the meaning of the reaction as well as of the risks of it is, of course, probable, for every possible clinic and hospital material was utilized in getting up papers on the subject. It would seem that an attitude toward such patients was called for that was more in agreement with the Golden Rule.

An article in the *Wiener klinische Wochenschrift* for September 10, 1908, in which Oppen-

heim describes another "reaction to tuberculin," serves very well to point the above remarks. Oppenheim wanted to observe the behavior of the mucous membranes to tuberculin and selected for this purpose—the male urethra! This mucous membrane, of course, reacted quite frequently to the irritant, and the author was rewarded by the appearance of acute urethritis which sometimes occurred in patients in whom the cutaneous reaction was observed and at other times in individuals in whom that reaction was negative. No control experiments with the component parts of tuberculin other than the bodies and products of tubercle bacilli are reported by the author, and no mention is made of the fact that the urethra, especially in men who have once suffered from gonorrhea—and some of Dr. Oppenheim's patients gave the history of that disease—reacts quite readily to irritants of any nature. The conclusions of the author are quite characteristic: "Not only the conjunctiva but the urethral mucosa as well may give evidence of an allergic reaction to the injection of tuberculin; such reaction is weaker and less constant than the ophthalmoreaction; no practical diagnostic significance can be attached to the urethral reaction." It would seem that these conclusions could have been safely established by a little deductive reasoning without the necessity of carrying the experimental, inductive research to an absurdity.

The zeal of the physician to discover new facts in the art of science of medicine must not run away with his better judgment; and certainly the desire to figure in literary discussions and to be among the first to try every newly recommended procedure must not overcome his sense of duty to the patient and consideration for the health and comfort of the latter. Any other attitude is fraught with danger not only for the individual physician, in case of some untoward accident, but for the good repute of the whole medical profession as well.

### MEDICAL ARTICLES IN LAY PUBLICATIONS.

(Editorial in *American Medicine*, Nov., 1908.)

The increase of medical articles in lay publications presents questions that must be carefully considered sooner or later by the county societies. Within a year or two the lay press has been flooded with articles written by medical men. In the great majority of instances these have had the laudable purpose of enlightening the people in regard to hygienic and sanitary matters. Thus considered these contributions cannot be too highly commended and their publication is certainly to be encouraged. But there is another type—those that are so thinly veiled that the underlying motive is at once apparent. This, in plain language, is self-advertisement and articles written and published with this object cannot be too severely condemned. They are not only unprofessional and contrary to every ethical principle, but they are positively harmful in that in nearly every instance they either convey misinformation, or give data that lay readers cannot properly grasp. False impressions and ideas are created, and without the broader medical knowledge that leads to intelligent discrimination, the lay reader arrives at conclusions that are a strange conglomeration of fact and fancy. It is the old story of a "little learning" which pat-



ients so proudly parade at every opportunity, but which, as every physician can testify, forms one of the greatest obstacles to successful medical practice.

The medical man, therefore, who in his shortsighted efforts to attract attention to himself and his work, contributes these "write-ups" to the newspapers, deserves nothing but censure. He is unworthy of respect and will soon find himself *persona non grata* among decent, earnest physicians.

The recent magazine articles of Dr. Woods Hutchinson exemplify the kind of communications that medical writers should strive to furnish for lay perusal. In every way they are adapted to the dissemination of the right kind of knowledge and well calculated to aid and not interfere with successful medical practice. Not only are these articles by Dr. Hutchinson beautifully written, but they are doing a true missionary work in furthering the gospel of modern hygiene and sanitation. Such contributions reflect honor on their author, but entirely because of what they do for the civilized world—not for their advertising value.

Newspaper medicine may, therefore, do a great deal of good or a great deal of harm. When it gives the people truthful information for their welfare, it is good, but when it is prepared and published solely in the interests of the author or some other individual it is all wrong!

An article in the *Sunday World* (November 1, 1908), purporting to be by Dr. C. H. Duncan, of New York City, is one of the most flagrant of recent contributions to lay publications. The article is highly technical, refers to a special disease, elucidates (?) a special treatment, and *mirabile dictu*, concludes with a case report! In a medical journal, Dr. Duncan's paper would have been eminently fitting and doubtless a valuable contribution to the subject. But appearing in a newspaper it is most reprehensible and permits of only the most ugly and unpleasant deductions. It is impossible to tell how far Dr. Duncan was responsible for the appearance of this article, for newspapers have a way sometimes of placing innocent medical men in embarrassing positions, but the fact that the article is a signed one, would make it appear that it was published with the full knowledge and consent of the ostensible writer. If this is the case we blush for his immodesty and deplore the judgment that would permit the publication of an article of this character in a lay journal. As the article stands, it is a sad prostitution of evident talents, a flagrant violation of the established customs of the profession, and entirely incompatible with the truest principles of medical ethics. The way in which the names of Dr. Bodine and Dr. Prichard are dragged in, is most unfortunate and cannot fail to annoy these gentlemen who are medical men of unimpeachable integrity and standing. The whole affair is regrettable, for aside from the suspicion it engenders, it gives authority to a treatment, that without much greater and far reaching investigations is unwarranted and unjustifiable. Unfortunately the lay readers who peruse the article will not appreciate this all important fact.

A periostitis at the margin of the orbit may resemble a cellulitis. It is often of syphilitic origin.—*American Journal of Surgery*.

## THE EMMANUEL MOVEMENT.

(*West Virginia Medical Journal* Editorial, Oct., 1908.)

Our readers have doubtless read much of the Emmanuel Movement, so called because it originated and is carried on in the church of that name in Boston. The pastor, Rev. Elwood Worcester, D. D., Ph. D., is conducting a crusade against disease real or imaginary, chiefly the latter, the remedy used being a modified form of the "faith cure." He has the aid of other preachers, and some eminent physicians have given the movement their sanction. The motives of these good men cannot be questioned, and their efforts have no doubt been productive of much good. Whether this is only temporary, and whether or not it is to be followed by a worse condition than those for which the remedy has been applied, only time can tell. In essence the remedy is simply the old, old one of producing on susceptible minds a powerful impression by what is called, in modern parlance, "suggestion." Similar methods were practiced in Egypt, and the Ebers Papyrus, which dates back to 1552 B. C., mentions the cure of disease "by the laying on of hands." Mesmer, an M. D. from Vienna in 1766, astonished the world by his tricks of "suggestion," claiming and probably thinking, that his wonderful results were due to *magnetism*. This theory was punctured by Franklin's committee, which declared magnetism to be "one fact more in the history of human errors, and a great proof of the power of imagination."

Truth compels the admission that, in this matter as in many others, the medical profession has been slow to "catch on" to the essential truth that now seems so patent, namely, that "suggestion" is of very great value in many conditions encountered in the practice of our profession. The quack and the ignorant are bold, and are quick to proclaim as truth any new thing that has the promise of being a money maker, while the honest scientific investigator moves slowly and hesitates to proclaim as true that which has not yet been demonstrated. As a result of our slowness, the ignorant quack has long been reaping a golden harvest. The "faith cure" fad has had its day and scarcely "ceased to be." The Christian Scientist has commanded the attention of the country, and millions of money have been poured out in his support. And the healing art has been deprived of a powerful aid, and one that is perfectly proper when honestly employed by those who understand disease and human nature.

Is it properly employed in the Emmanuel Movement? We are inclined to doubt it. We give those engaged in it credit for the best of motives. They make no claim that they can cure organic disease, and say:

"We cannot reiterate too frequently that \* \* a thorough medical examination is absolutely necessary before the institution of any form of psychic treatment, not only to rule out any organic disease or distinctly organic complications of a seemingly pure functional disorder, but also to obtain an intelligent comprehension of the case. Only in this way can grave error be averted and the patient saved much unnecessary loss of time if other lines of treatment are indicated." Again: "The outline of

the treatment, like the diagnosis, should be in the hands of a competent physician."

The ministers engaged in this movement find their warrant in the historic fact that "Paul the Theologian and Luke the Physician, the one with his spiritual power and his commanding personality, and the other with his training in the Medical schools, join hands for the alleviation of human suffering." No one who has given this subject any attention will deny that in a certain class of cases, where no organic disease is present, much good may be expected from suggestion skillfully practiced. As pointed out by Shoemaker, if the method merely inspires the sick with patience, encourages a spirit of stoicism which forbids them to complain, it will be of great value, even if it does no more. In cases where morbid apprehension alone is the cause of disease and suffering, the method under consideration may be successful, both in allaying fear and inspiring the patient with renewed courage and hope, with which to face the hard problems of daily existence. The manner of the religious life is calculated to inspire faith and hope, which always act favorably in nervous diseases especially. "Faith stimulates and harmonizes the delicate machinery of the nervous organism," because it is a joyous emotion, and joy is a tonic always, under the influence of which the bodily functions are more perfectly performed. Faith and hope are helpful even in acute diseases. We have seen a man die with a very limited pneumonia, because depressed and hopeless from its inception; and a physician recover from a very grave attack of typhoid fever, who said that the thing which did him the greatest good was the remark, repeated by the writer and emphasized in his ear when delirious and very deaf: "*You are going to get well!*" Although delirious, the remark reached his subconsciousness and had an inspiring influence.

But we fear that the Emmanuel Movement is not free from danger. As pointed out by several eminent physicians, he who cures by suggestion is in danger of causing an introspection which will lead to the thought of other diseases that may be deemed amenable to treatment by the same method. Auto-suggestion will soon cause an increase in the number of hysterical and other nervous conditions. Again, this practice by ministers and in churches will invariably raise expectations that in many cases are doomed to disappointment. Hence the sick will lose faith in both physicians and religion.

There is but a narrow line of separation between the results of suggestion as practiced in the church, and hypnotism, and there is about the practice an air of mystery that is allied to the incantations of the African or our native Indian (Shoemaker). It calls to one's mind the alleged cures by witch doctors, by visits to certain sacred spots, by Perkins' tractors, which set London agog many years ago. All these brought the same "cures" the Boston clergymen are bringing about to-day by a more honest and intelligent application of the same principle. While doubtless very valuable when practiced by the well trained and skillful physician, and while any intelligent practitioner can read with profit the account of the Emmanuel Movement as set forth in the recent book—*Religion and Medicine*—we fear that the methods practiced by those highly versed in psychology, and evidently honest in their work,

may be imitated by many others of much zeal but little knowledge, and possibly less honesty.

We suggest that physicians now take a hint, and make their investigations of individual cases more thorough, trying to separate the purely functional from those that may have some organic basis, and thus make, by their very thoroughness, a favorable suggestion on the mind of the neurotic. If this be our constant practice, our patients will not need to rush for healing to our brethren of the ministry, one of whom has recently said: "No man is better fitted by profession to rescue from the hands of quacks what is true in mental healing, to discover proper methods of mental healing, and to make the matter a true science, than is the physician who will apply himself diligently to the study of the mind as well as the body." To quote Rev. Dr. Jos. H. Crooker: "For the clergy to ignore the verdict of the ages and attempt to revive an outgrown function, will be harmful to both public health and to the Christian church, as it would be for surgeons to substitute magic for anesthetics, or for doctors to give physic where repentance of sin is needed."

We, therefore, feel like saying to our brethren of the ministry what a Chicago physician is reported to have replied to a minister who asked for the doctor's bill for medical services rendered:

"You do your best to keep me out of hades and I will in turn try to keep you out of heaven as long as possible." If the clergy will confine their efforts to saving souls, we physicians will try to keep the bodily machinery in good working order.—J.

## Hospitals and Dispensaries.

### MORRISTOWN MEMORIAL HOSPITAL.

(From the *Newark Evening News*.)

The system of buildings connected with Memorial Hospital, all of which have been having extensive additions and improvements made to them, are nearing completion. The addition to the main building, which about doubles its capacity and adds greatly to the architectural character of the edifice, is almost completed.

Work on the Barker pavilion for contagious diseases is also about completed, everything about the structure, that is arranged so that one part may be isolated from another, being built with an eye to absolute sanitation. The floors and wainscoting are of tile. Where the floor and baseboard ordinarily meet at an angle there is a solid concave tile making it impossible for dirt or disease germs to gather; new bathrooms, a new steam-heating plant and other changes have also been made.

The new home for the nurses of the institution is also almost ready for occupation. The walls have been tinted to harmonize with the draperies and other furnishings. A small library is among the latter considerations. The grounds, particularly those of the Bell tract, recently added to the property, are being graded and beautified, and when all is done the institution will be one of the most complete to be found in the State.



### Free Dispensary at Asbury Park.

(From *The Shore Press*, Nov. 1, 1908.)

A movement that may eventually lead to the establishment of a city hospital in Asbury Park has been inaugurated in the incorporation and organization of a charitable society to conduct a free dispensary where medical and surgical treatment will be given those unable to pay for a physician's services. The officers of the organization are Dr. Thomas H. Pratt, president; D. C. Bowen, vice-president; J. Otto Rhome, treasurer, and Walter Taylor, secretary. At the organization in the register's office in the Seacoast building Dr. John Taylor was elected medical director and he has the authority to appoint assistants in the work.

Dr. Taylor is largely responsible for the movement. It is purely a charitable endeavor to which those whom he has interested have given their support. The plan is to secure some suitable location in Asbury Park where each day a physician will be in attendance two hours to minister to the medical and surgical needs of the worthy poor. It will also afford the physicians of Asbury Park an opportunity for occasional clinics to repay them to a certain extent for their services. A committee is now seeking some suitable place for the dispensary.

The society has been incorporated by Counselor Walter Taylor under the somewhat lengthy title of Free Dispensary for the Medical and Surgical Relief of the Deserving Poor. It is organized under an act of the Legislature of New Jersey approved April 21 last, which applies to the incorporation of associations not for pecuniary profit. The movement will be dependent to a greater or less degree upon the charitableness of the community toward it, but with the belief that a well community is a prosperous one, the organizers anticipate no difficulty in securing support for the institution.

### Essex County Isolation Hospital.

(From *The Newark Evening News*.)

(The following is an abstract of Dr. M. J. Synnott's reply to the criticisms against the hospital. See the editorial from the *Evening News* printed in the Journal last month, page 367.—Editor.)

Dr. Martin J. Synnott has replied to the attack made on the board of managers of the Isolation Hospital, at the Belleville Board of Trade. Freeholder Black had referred to the members of the Soho board as "mismanagers" who were actuated by "spite," and that the plans provided for the admission of smallpox cases. Dr. Synnott insisted upon the public knowing the facts and he referred not only to Mr. Black's statements, but to other misstatements.

First, that "the hospital had no patients and forty employees." It has 23 patients, 13 of whom have scarlet fever and ten diphtheria. The hospital was opened October 9 and on October 13 four patients were admitted. Since then there have been almost daily admissions, and several have been discharged cured. It will cost little more to care for 100 than 20. They had pointed out to the freeholders methods of economizing, but without result, as no attention was given the matter. The need of this hospital

has been demonstrated. From reports of health officers, the hospital will be inadequate to care for only scarlet fever cases that should be admitted.

Dr. Synnott then refers to the great importance of being ready for a sudden emergency—to promptly receive dangerous cases and prevent extensive epidemics, therefore trained employees must be on hand, and those employed had been kept busy; then the civil service regulations must be complied with.

Second: "The institution should be kept for smallpox as originally intended and planned." But in consultation with experts it was found this could not be done, as the doctor sets forth at some length, and the attempt would render the county liable to damage suits. Scarlet fever and diphtheria are vastly more prevalent, and there is in fact, no smallpox in the county. The plans did call for another pavilion for smallpox, but the funds have not permitted its construction. Would it not have been folly to reserve one building with all the cost for maintenance, with no cases, and crowd one of the two buildings with patients having the two diseases that were so prevalent? We have advised erection of small building to cost \$5,000, but no steps have been taken by the freeholders to provide for it. He speaks of one of the finest isolation hospitals in the world, in New York, where only three rooms are reserved for smallpox. In the event of smallpox occurring the managers would be justified in going ahead with the erection of temporary buildings or tents. They will handle the matter energetically when occasion requires.

Third: "Tuberculosis cases should be sent to Verona or Glen Gardner." The managers are considering their reception, but they must live up to the law governing them. The Verona hospital provides for only 35 cases and Glen Gardner 100, but only incipient cases are received; besides the most dangerous cases—to the public health—are the advanced or incurable cases.

Fourth: "The freeholders cannot afford to do what the board of managers asks." On May 5th the managers informed the freeholders that an appropriation of \$96,071 would be necessary for furnishing, salaries, two small buildings for smallpox, and mixed infections and for maintenance; that amount was arbitrarily cut down to about one-half; the responsibility rests on the present board of freeholders.

Fifth: "The 'vacuum system' of ventilation has been tampered with. This system was designed to catch, imprison and kill each germ before getting into the air outside the hospital." We found all windows hermetically sealed, and the hospital depending absolutely on an artificial system for ventilation. Suppose this complicated system broke down or got out of order, with the wards in use for patients. We provided for such an emergency. The sunlight and oxygen of the outside atmosphere are doing this work better than any artificial agent.

Sixth: "The board of managers is running the hospital to spite a prominent Newark physician." Our recommendations and changes in buildings were not in criticism or reflection on the gentlemen who planned the institution. Dr. Herold and his associates on the Newark Health Board have our respect and admiration for what they were able to accomplish under great difficulties. They are scientific men and have made

their board one of the very best and most efficient bodies in the country. The board of managers in their communication to the freeholders on July 9th, took occasion to express its appreciation and its opinion that the county owed them its thanks. There has been no thought of "spite." When the institution was opened to general inspection, no criticisms were made.

Dr. Synnott closes with these words: "We are prepared to meet these critics at the hospital or elsewhere and give them as much more of our time as they may require to investigate as thoroughly as they wish."

At a meeting of the Civic Club of the Oranges, December 16, Dr. Ralph H. Hunt, in discussing the need of caring for tuberculosis patients, said:

In the Memorial Hospital there are twenty beds, and in every bed a patient. There are not enough beds there. It is a continual struggle to keep the pavilion open because of the financial issue involved. There is not an incipient case in the ward. As fast as one patient is discharged there are three applications for his place. Dr. Hunt declared the local hospitals should have 100 beds, and he believed that the county hospital should provide at least this number in Soho.

## Brief Medical Literature Items.

**Diagnosis of Pneumonia in Infancy.**—According to R. G. Freeman (*Jour. Amer. Med. Assn.*, July 25, 1908), one who waits for the discovery of positive physical signs of pneumonia in an infant may have to wait until the patient is convalescent. The disease presents characteristic signs on which a diagnosis may be based before the lungs are examined. The symptoms are sudden onset, depression, rapid respiration with ratio to pulse of 1 to 3, fever and usually cough. If with these are noticed flaring nostrils, pneumonic breathing and expiratory grunt, a definite diagnosis may be made, while rigidity of the neck and upper extremities without rigidity of the lower extremities is an important confirmatory sign if present. Auscultation and percussion of the chest should be used only in confirmation of the diagnosis and for localizing the lesion and for information as to its character.—*American Journal of Obstetrics.*

**Scarlet Fever.**—Dr. J. McCrae discusses fully, in the *Montreal Medical Journal*, September, 1908, the mode of infection and the complicating diseases, as shown in the first series in the wards of the Alexandra Hospital, Montreal. They number 325 cases, with 23 deaths. He lays down as the important things in scarlet fever the following points: Make the diagnosis at the earliest possible moment. Look at the skin, all of it, with the patient completely stripped, if a child. Look at the throat, especially the palate, and the tongue, especially the papillae. If you have made the diagnosis, do not later, for a moment, even mentally, go back on it. Lay down the law as to treatment, twenty-one days' milk diet and twenty-one days' bed. When you are tempted to weaken or to recede from this position, just think how, when the

patient dies of nephritis, they will say, "Dr. Blank was not very strict when he had scarlet fever."

**Treatment of Scarlet Fever.**—Max Goetz, in *Munch. Med. Woch.*, August 1, 1908, considers the care of scarlet fever, especially with reference to bathing and diet. He hesitates to use cold baths on account of the possibility of chilling of the skin and bringing about an attack of nephritis. He allows warm sponging of the limbs and body a portion at a time, the whole of the body not being uncovered at the same time. He believes that nephritis is possible up to the fifth week of the disease, and does not allow a full bath until that time. He keeps the child in bed five entire weeks on that account. He believes that we must give the child sufficient nourishment to keep up his strength and that we cannot keep him long on a milk diet. After the first week he allows the child to eat what he likes and as much as he wants, provided that meat, eggs and soups are excluded. The author gives a bill of fare that may be of use to the mother in feeding children with scarlatina. He has treated 150 cases of the disease with three deaths. He has never had a case of scarlatinal nephritis of the inflammatory type. He believes that such cases are better treated in a hospital than at home, but that this is not always possible.—*American Journal of Obstetrics.*

**A Typhoid Carrier.**—Dr. Gregg, in *Boston Medical and Surgical Journal*, reports a case in which seven cases of typhoid occurred among the inmates of a small boarding-house in a farming town between August, 1905, and March, 1908. The mistress, who prepared all the food herself, had had typhoid in 1856. No other cases occurred in the neighborhood at the times the respective patients were seized. An examination of the blood and urine proved negative, but examination of the feces gave pure cultures of a bacillus in every way similar to the typhoid bacillus. The same result followed examination two weeks later. There was no other discoverable source of infection. The woman herself was in excellent health.

**Etiology of Whooping-cough.**—C. Fraenkel (*Munch. Med. Woch.*, August 11, 1908) has examined the sputum of eight cases of whooping-cough with reference to the bacteriological cause of the disease. According to Bordet and Gengou, the etiological factor in this disease is a microorganism similar to the bacillus of influenza. The sputa were inoculated on media containing human blood. The colonies were of a yellow or yellowish-brown color, spread over the culture medium. The influenza bacillus grows differently from that isolated from these cultures. Its colonies are smaller and whiter. The whooping-cough bacillus is a small, motionless organism, stained by Gram stain. It was found in the early days of all the eight cases that were examined. When apes were inoculated with it there was produced a paroxysmal short cough, which lasted eight or ten days. No expectoration was observed in these animals.

Georg Arnheim (*Berl. klin. Woch.*, August 3,



1908) has examined the sputum of twenty cases of whooping-cough and made five autopsies, seeking for the bacillus of Bordet and Gengou. He has isolated the bacillus in six cases, and propagated it to the tenth generation. The agglutination with horse serum was positive. Agglutination and complement fixation was shown with serum of immunized animals and serum of children who had had the disease, and in animal experiments.—*American Journal of Obstetrics*.

**Iritis, With Special Reference to Gonorrheal Iritis.**—W. M. Beaumont, *British Med. Journal*, July 18, 1908, believes that gonorrheal iritis is much commoner than some authorities are inclined to allow. He has seen twenty-one cases of iritis occurring among patients admitted to the Royal Mineral Water Hospital, Bath, for rheumatism, gout or rheumatoid arthritis. Sixteen of these patients confessed to having had gonorrhea. They all corresponded with each other in a striking manner. Almost invariably men, comparatively young as a rule, they gave the same history of an iritis accompanied or preceded by "rheumatism" in the joints of the lower limbs. Walking with a stick, or even on crutches, they gave the same tale of an acutely painful iritis with intense redness of the conjunctiva which relapsed time after time over a period of months or years. They had tried all kinds of treatment without avail. They gave a history of gonorrhea months or years before the onset of the iritis and rheumatism.

**The Newer Methods of Diagnosis in Ocular Tuberculosis.**—In the course of a long article George S. Derby (*Archives of Ophthalmology*, September) says the cutaneous test takes but little more time than the conjunctival one in its application, is at least equally sensitive, and is harmless to the patient. He fears the conjunctival test (Calmette) in all diseased eyes, even though the process is healed, and in the healthy eye, when there is active disease of the cornea in the other. The older subcutaneous injection also is likely to light up a fresh reaction in an eye previously tested, and may keep the eye inflamed over a long period of time. The cutaneous test is of great value, because it seems to be specific of tuberculosis. It is in our author's experience more sensitive than the conjunctival test, which it will displace in all probability.

**Tuberculin Treatment of Pulmonary Tuberculosis.**—Latham and Inman report further investigations, supplementary to their communication to the Royal Society of Medicine, April, 1908, with regard to administration of tuberculin in pulmonary and other tuberculosis. They reach the following conclusions:

1. Tuberculin may be given with effect by the mouth or rectum or subcutaneously. The dosage is dissimilar, but animal experiments, opsonic curves, and temperature charts show that the effects produced are the same.

2. The administration of tuberculin meets with little, if any, success so long as successive autoinoculations spontaneously occur and cannot be limited by the means at our command.

Absolute rest is the most efficient means for limiting autoinoculation.

3. The administration of tuberculin may be adequately controlled in a large percentage of cases of pulmonary tuberculosis by a careful daily observation of the temperature and clinical conditions of the patient on the lines indicated above.

4. In cases of difficulty valuable information may often be obtained from an examination of the opsonic index.

5. The German method of the routine administration of tuberculin by gradually increasing doses at stated intervals is not to be recommended. It is only satisfactory in a limited class of cases, and even then may not lead to the best results.

6. Tuberculin is a dangerous drug and its administration requires considerable experience. It is capable, when given improperly, of producing disastrous and even fatal results.—*A. M. A. Journal*.

**Injections of Alcohol in the Treatment of Blepharospasm.**—E. Valude, *Annales d'Oculistique*: Valude reports three cases to show that alcohol injections made at the point of exit of the facial nerve constitute an excellent means of treatment, and are inoffensive and but slightly painful. It is of great value in trigeminal neuralgia. Moderate facial paralysis may follow the injection, but this usually disappears under treatment. It must not be allowed to develop to such an extent as to interfere with closure of the eyes during sleep (lagophthalmos), but be counteracted by electricity and massage. Valude claims that the patients will prefer immobility of the cheeks and lids to the discomforts of spasm. The alcohol is used in 80 per cent. solution with stovaine, injecting from 1 to 1.5 cc. The injection should be made slowly, moving the point of the needle around the supposed point of exit of the nerve. Usually only one injection is required, and cure is generally permanent. Exposure of the cornea, in case of development of facial paralysis, may have to be prevented by occlusion, provisional suture of the lids, or temporary blepharorrhaphy, and the use of electricity.—*American Journal of Surgery*.

**Recent Progress in Knowledge of Etiology of Diabetes.**—Blumenthal, in *Deutsche Med. Woch.*, Berlin, comments on the discovery of the substances in the pancreas which activate the destruction of sugar by the ferments, and regards the lack of these substances as the primal cause of diabetes, although the final demonstration of this has not yet been given. The nervous system can also be regarded as participating in the etiology of diabetes as the central organ regulating all the metabolic processes. The muscles can also be regarded as a diabeto-genetic organ, as the oxidation of sugar takes place principally in the muscles. If the functional capacity of the muscle for oxidation of sugar suffers for any reason, hyperglycemia and glycosuria are the inevitable result. Sugar is formed in the diabetic from the carbohydrates and from the albumin, and the amino acids are an important source for the production of sugar from albumin. The formation of sugar from fat has not been proved or disproved to date, but the production of acetone from albumin is now an established fact. As the albumin bod-

ies are destroyed, carbohydrates are produced, which thus provide material that powerfully promotes the oxidation of acetone in the body.

**Management of Gastric Ulcer.**—Dr. J. W. Bell, of Minneapolis, in a paper on this subject read at the annual meeting of the American Gastroenterological Association, said the following conclusions seemed warranted: 1. That an early and complete diagnosis was the first essential in the successful management of gastric ulcer. 2. That all cases of acute gastric ulcer were amenable to proper medical treatment, the only exceptions being cases characterized by uncontrollable hemorrhage and perforation. 3. That all uncomplicated cases of chronic gastric ulcer were amenable to proper medical treatment and should be so treated. 4. That chronic indurated ulcers of long standing, involving especially the pyloric portion of the stomach, including their complications and sequela, frequently demanded surgical interference. 5. That the end results following gastroenterostomy for the relief of chronic ulcer were not satisfactory. 6. That the ideal surgical treatment of chronic indurated ulcer was excision in some form.

**Lancinating Pains in Head in Tabes.**—Lang, in *Weiner klinische Woch.*, October 15, 1908, calls attention to the pains resembling neuralgia which are liable to be encountered in incipient tabes. The pains follow the usual routes of neuralgia, but the nerve trunks are very little, if at all, sensitive to pressure, while severe sensory disturbances are generally evident. Another feature of this pseudoneuralgia is that the trigeminal and occipital nerves are generally affected simultaneously or alternately, which is rare in true neuralgia. Another means of differentiation is the inefficacy of ordinary treatment for neuralgia. His first patient was a woman of 46, who, nine years before, had suffered for weeks from intense left headache. After an interval of some years the headache returned in the left side and the trigeminal nerve was resected; as no improvement was observed, the Gasserian ganglion was taken out. The agonizing headache still continued in paroxysmal exacerbations, but pressure on the nerve trunk was nowhere painful, notwithstanding the intense pain in the trigeminal and occipital domain. Hyperesthesia in the thorax and anomalous reflexes confirmed the final diagnosis of tabes. He describes further seven more cases, out of a much larger experience, all with these lancinating pains in the head as the first sign of tabes.

**Lecithin in Exophthalmic Goiter.**—For the past three years Berkley has used an alcoholic solution of lecithin, with excellent results in many cases of asthenia (not psychasthenia) and much more recently has extended its service to a few cases of exophthalmic goiter with strikingly favorable effect. Notwithstanding the nauseous and disagreeable odor of the solution, the patients cling to it until the nervous symptoms are allayed. All these patients placed on it, state that an hour after the medicine is taken, "the nerves" are quieted and there is a cessation of acute symptoms. Berkley tried it for alter-

nate weeks with glycerophosphates, quinin, and gentian, and the patients lost weight, with increase of nervous phenomena on the glycerophosphates, and gained weight, with abatement of nervous symptoms, on the lecithin. Lecithin is out of place with disturbed digestion, and it fails without the assistance of a milk diet. The author discusses its action and describes the histories of four cases of exophthalmic goiter, two of severe type, in which this treatment proved beneficial. He suggests a further trial of the combination of lecithin and milk, to contract the disordered forces of the thyroid.—Bulletin John Hopkins Hospital.

**Transplantation of Vessels, Organs and Limbs.**—Alexis Carrel gives an account of the experimental work on animals in auto and heterotransplantation of vessels, organs, etc. He shows that vascular suturing, under aseptic conditions and correctly applied, gives excellent results, but a fault of technique, even very slight, can be followed by obliterative thrombosis. Success depends less on the way of handling the needle or passing the threads, than on a knowledge of the causes determining a deposit of fibrin in the line of anastomosis, and their removal. Occasionally after transplantation of veins as a substitute for arteries, late obliteration may occur, hence this procedure seems to be a little less safe than the direct anastomosis of artery with artery. Carrel finds it possible, however, to preserve the vitality of extirpated arteries in Locke's solution at low temperature for some days or weeks, so that good results can be obtained after transplantation, though marked histological changes take place. Other methods have been less successful. It is not always true, moreover, that the transplanted vessel must be from the same species of animal, but the success is greatest when the species are most closely related. Experiments with transplantation of various whole organs, such as the kidney and spleen, with re-establishment of their circulation by vascular anastomosis, have also been successful and transplanted kidneys have functionated normally. In case of glands like the thyroid, parathyroid and ovaries, the re-establishment of the circulation by anastomosis is hardly necessary, though in case of the ovary it might be advantageous. In heterotransplantation of the intestines the difficulty is to avoid infection which caused the failure of both of Carrel's experiments of this nature. Heterotransplantation of rather extensive anatomical regions such as the ear and scalp, with their artery and vein, has been successfully done in a dog, and Carrel has succeeded in transplanting a leg from one dog to another. The difficulties here are chiefly surgical, and he says if further experiments in this line sufficiently demonstrate that the functions of the transplanted limb are re-established, it may be permissible to try this operation in a suitable case on man. In a general way, however, it is necessary to emphasize that even a method that gives excellent results on animals must not be directly applied on man. There are marked anatomical and physiological differences between the human tissues and organs and those of the dog and cat, and the methods should be modified accordingly. The experiments he records have been performed within the past two years, and it is too soon to tell what may be their practical value.—*A. M. A. Journal*.



**Ocular Complications of Pregnancy.**—Hiram Wood (*Jour. Amer. Med. Assn.*, July 18, 1908) states that, apart from the various nervous symptoms incidental to pregnancy which often affect the eye functions, four serious ocular manifestations are seen more or less frequently during pregnancy or after parturition. These are: 1. So-called uremic blindness, usually seen in connection with eclampsia; 2. albuminuric retinitis of pregnancy. Rarer forms are: 3. loss of central or peripheral vision due, so far as symptoms point, to a retrobulbar neuritis, and 4. a form of neuroretinitis, not essentially suggestive of the albuminuric type, but showing numerous retinal exudates and hemorrhages. There is doubt as to whether the term uremic should be applied to the blindness occurring in connection with puerperal eclampsia. The same is true regarding the renal origin of what is termed the albuminuric retinitis of pregnancy. There is good reason to think that both the renal and ocular complications are manifestations of the same process—a toxemia. The third and fourth varieties of ocular complications of pregnancy are also, doubtless, the results of pregnancy toxemia, a toxic neuritis or toxic thrombosis probably being the active factor in causation.—*American Journal of Obstetrics*, December, 1908.

**Psychotherapy.**—Dr. A. L. Benedict, in discussing in the *Therapeutic Gazette*, September, 1908, the various forms and grades of psychotherapy, insists that it is a very dangerous weapon in the hands of any one but a conscientious, hard-headed, well-trained physician. He considers the Emmanuel Church movement especially dangerous, because of the eminent respectability and intelligence, in non-medical matters, of its advocates. He says: "We need not discuss whether the hypnotizer exercises a special extrinsic influence over the subject, or whether all hypnotic suggestion is intrinsic in the strict scientific sense. Practically, some persons can hypnotize better than others, and the victim is virtually under the control of another will." He says that the very class of cases to which religious influence and lay psychotherapy are best adapted lie dangerously close to the border of insanity, and in any large series of such cases it seems probable that the most insidious forms of insanity and those connected with sexual and criminal tendencies will occur with frequency enough to make one shudder at the possibilities.

**Acute Anterior Poliomyelitis**—W. B. Cadwalader (*Med. Rec.*, September 19, 1908) presents a study of three cases of this affection. He says that acute anterior poliomyelitis is essentially an acute polioencephalomeningomyelitis. The process is the same during infancy and adult life. The process is most marked in the lumbar and cervical enlargements of the cord and frequently may extend upward as far as the cerebral cortex. Interstitial changes predominate and occur together with parenchymatous changes. Parenchymatous changes never occur without interstitial changes. The localization and intensity of cellular infiltration depend upon the distribution and vascularity of the area affected. Neuronophagia is an important factor in the destruction of ganglion cells.

## Therapeutic Notes

One drop of a one per cent. solution of nitroglycerine, three times a day, relieved a patient of albuminuria in a few days.—*Exchange*.

**Boils**—The following known as Ludlow's ointment is of value applied locally in the treatment of boils and other suppurating processes:

℞ Atropin. sulph. .... gr. ss  
Aconitinae ..... gr. iss  
Ol. tigllii ..... m. ij  
Lig. petrolati ..... 3j

M. Ft. ungt. Sig.: Rub in a piece the size of a pea over the affected area, and repeat once daily.—*Journal A. M. A.*

**Chancre**—Erdos advises the following method: If the chancre is of recent date and situated on the free edge of the prepuce or of the labium as the case may be, excision followed by aseptic suture, is to be recommended. If the sore is ulcerated and of long duration, two months, for instance, and if excision is impossible, a few drops of a soluble salt of mercury, such as the benzoate, the biniodide, or the bichloride, may be injected around the chancre. Having washed the parts with a solution of sulphate of copper or nitrate of silver of strength 1 in 50, an ointment should be applied consisting of 1 gram of white precipitate, ½ gram of resorcin, 30 grams of simple ointment, and 10 grams of lanolin. The same ointment can be used for the normal chancre. The internal treatment should consist as much as possible in mercurial injections. If these are not permitted the ordinary inunction treatment should be followed.—*Lancet*.

### Conjunctivitis—Granular.

Copper Sulphate ..... 1 gr.  
Salicylic Acid ..... 2 gr.  
Cocaine Hydrochlor. .... 1 gr.  
White Petrolatum ..... 3iiss

Apply at night. Wash off in the morning carefully, with a warm solution of borax.

**Gastralgia.**—The following is recommended by Shoemaker:

℞ Spts. chloroform. .... 3iv  
Spts. aetheris comp. .... 3vj  
Tr. capsicum ..... 3j  
Aqua dest. .... q. s. ad. 3iij

M. Sig.: Teaspoonful in water every half-hour until relieved.

**Hyperchlorhydria.**—Gompertz uses the following:

℞ Sodii bicarbonatis  
Calcii carbonatis  
Mag. pond. .... aa 3ss

M. S.: A teaspoonful after meals.

If diarrhea exists instead of constipation, bismuth subnitrate is substituted for the magnesia.—*Yale Medical Journal*.

**Itch.**—Dr. C. E. Boynton reports the case of a young man who, having just recovered from an extensive scald of the arm, caught the itch. Colonies extended in all directions, and soon the young man suffered misery. About one application of the following ointment cured him,

but he declared that he was nearly frozen by the menthol:

Menthol .....	gr. xl
Ichthyol .....	3iv
Calcium Sulphide.....	3j
Sulphur .....	3vj
Wool-fat .....	
Olive Oil, sufficient of each	
to make .....	3iij

Apply as required.

**Lumbago.**—Dr. J. J. Levy, in *New York Medical Journal*, highly lauds the use of dry cups in lumbago. The editor of this (W. Va.) Journal has often applied them with marked relief in this very painful affection, using common tumblers. Levy recommends that their application be followed by the following internally:

℞ Potass. Acetatis.....	3ss
Sodii Salicylatis.....	3iij
Aquae Gaultheriae.....	q. s. ad. 3iij

Ft. solutio. Sig.: Teaspoonful in water every four hours.

Also this to back:

℞ Methy. Salicylatis.....	5i
Spiriti Chloroformi.....	3ss
Linimenti Saponis.....	q. s. ad. 3iij

M. Sig.: Rub in well for ten minutes night and morning.

The *Medical Review* recommends the following as a local application.

℞ Tinct. iodin. ....	3ij
Tinct. aconiti rad.....	3iv
Spt. chloroformi.....	3j
Lin. saponis .....	ad. 3iv

M. Sig.: Apply locally several times daily.

#### Night-Terrors in Children.—

℞ Potassii bromidi.....	gram. 0.5
Tinct. hyoscyami .....	gtt. x.
Syrupi simp.....	gram. 1.5
Aquae .....	gram. 10

M. To be taken in a single dose on going to bed.—*Journal de Medicine de Paris*.

**Phlebitis.**—Dr. E. Herz recommends the application of the following ointment:

Ichthyol .....	3iiss
Wool-fat .....	
Petrolatum .....	aa 3iiss

If the phlebitis is of gouty origin, the following pills are at the same time used internally:

Colchicum Seed .....	gr. xv
Ext. Digitalis.....	gr. vj

Make into 20 pills. One pill a day.

**Pruritus Vulvae.**—The following combination is highly recommended by Beall as having good results when all other means had failed:

℞ Menthol .....	gr. viij
Quinin. sulph. ....	gr. xx
Ac. carbolicus .....	gr. xxiv
Ichthyol .....	3iiss
Lanolini .....	5vj
Ol. ricini .....	3x

M. et ft. ungt

Sig.: Apply freely after washing the parts with hot water.—*American Journal Clinical Medicine*.

**Ulcer of the Leg.**—Schultze finds that camphor gives the best results in ulcers of the leg. The following are his prescriptions:

℞ Triturated camphor, .....	3ss
Zinc oxide .....	3viss
Lard .....	q. s. ad. 3ij

Or:

℞ Triturated camphor.....	3ss
Zinc oxide,	
Olive oil, of each.....	3iij

—*New York Medical Journal*.

**Whooping Cough.**—Benjamin Edson, of Brooklyn, N. Y., recommends the following for whooping cough:

℞ Creosote .....	3iij
Eucalyptol .....	3ij
Spt. chloroform.....	3vj
Terebene, ad.....	3iij

M. Sig.: For inhalation. Fifteen drops on sponge wrung out of hot water.—*Medical Bulletin*.

Locally in the treatment of acute tonsilitis hydrogen peroxide and guaiacum are recommended.—*Exchange*.

## State and Local Societies' Meetings; Abstracts of Papers Read.

### NEW JERSEY SANITARY ASSOCIATION.

#### Thirty-Fourth Annual Meeting.

The thirty-fourth annual meeting of the New Jersey Sanitary Association was held at the Laurel-in-the-Pines Hotel, Lakewood, N. J., December 4th and 5th, 1908. It was called to order at 4 o'clock P. M., by Professor J. B. Smith, Sc. D., of New Brunswick, chairman of the executive council, who, after making some announcements, introduced the president, John B. Dunklee, C. E., of South Orange.

The president then announced the first paper on "Sanitary Inspection of Schools," which was presented by W. G. Schaffler, M. D., of Lakewood. He introduced the subject under the heads: 1. The practical working medical inspection of schools; 2. Results so far obtained here and elsewhere, based on reports and especial data obtained; 3. Historical resume of sanitary conditions; their needs and remedies. Dr. Schaffler's paper dwelt with the first head and the others were treated by Dr. Richard C. Newton, of Montclair, and J. B. Betts, Esq., of the State Board of Education. The benefits to the individual and to the State by proper school inspection were ably set forth and the importance of thoroughness in the work by most competent men was emphasized. We hope to insert these papers in later issues of our Journal.

Dr. John L. Leal, of Paterson, discussed "The Necessity for Schools of Instruction for Health Officers." He especially urged that medical men were the proper men for appointment as health officers and of all subordinate officers whose positions required knowledge of disease and means best calculated to prevent it, but em-



phasized that these should be physicians especially instructed in sanitary science and its practical administration. He spoke of the great need of some college taking up the work of instruction and expressed the belief that Rutgers College would be willing and would properly do this work if it was assured adequate financial support, and that the State should give that support.

The next subject, "Tuberculosis," was presented in the form of a symposium under the following heads, which were discussed in a series of papers: (a) "The Necessity of Bovine Tuberculin Test," by Professor E. B. Voorhees, Sc. D., of New Brunswick, director of the New Jersey Agricultural Experiment Station; (b) "Methods of Organization in the Tuberculosis Campaign," by W. C. Smallwood, Esq., executive secretary of the New Jersey Association for the Prevention and Relief of Tuberculosis; (c) "Home and Sanatoria Treatment," by Dr. S. B. English, superintendent of the State Sanatorium, Glen Gardner; (d) "After-Cure of the Discharged Patient," by Dr. Theodore Senseman, of Atlantic City. These papers all showed the great progress that had been made during the past year in the campaign of stamping out this great scourge, in our own State. Mr. Smallwood's address showed him to be a man of remarkable energy and good practical judgment and that the society which he served has done excellent work during its brief period of existence. Mr. Smallwood emphasized the importance of having the physicians of the State more generally interested and that his society was now working through the county medical societies, recognizing the fact that the physicians are the logical leaders in combating this disease. The papers were generally able and practical, Professor Voorhees' was a strong presentation in favor of a more general and intelligent use of the tuberculin test, and should have the fullest co-operation of the farmers for their own benefit as well as for the public's protection. He considered at some length the economic side of the question as well as that of the health of the human family.

The president's address on "The Reclamation of Lands Subject to Tidal Overflow" was a very able presentation of that subject. He considered at some length the three methods of reclamation—by drainage, by embankment and by elevation. He cited under the first the drainage of salt marshes in New Jersey in the work of abolishing mosquito-breeding marsh areas. Under the second he spoke of the extensive work in Holland, and application of embankment protection in the system of levees in the lower valley of the Mississippi River in our own country. Under the third he gave an interesting account of the wonderful work in the Potomac River improvement at Washington, D. C., under plans approved by Congress, by the United States Engineer Department. (Mr. Dunklee was the resident engineer.) The result has been 621 acres reclaimed from tidal overflow—the property of the United States which has now been set aside by special act of Congress, as a public park. By the expenditure of about \$2,300,000 the government has acquired property which at a very conservative valuation is worth \$6,750,000. He closed with a comparative setting forth of the advantages and disadvantages of these three various methods and decidedly favored the latter, especially in the

vicinity of large cities; while the cost is somewhat greater the land reclaimed is far more valuable.

The subject of "The Washington, D. C., Aqueduct and Filtration Plant" was ably, and, in an exceedingly pleasing and practical way, by means of lantern slides, described by E. D. Hardy, C. E., member of the American C. E. Society. He described the conduit, reservoir and tunnel between the Georgetown and McMillan Park reservoirs; then a lengthy account was given of the filtration plant. It was exceedingly interesting to hear his account of the typhoid fever epidemic which was experienced at Washington the year after the completion of the filtration plant, and the thorough investigation under Dr. M. J. Rosenau, director of the Hygienic Laboratory. After an exceedingly thorough investigation, the final report made in May, 1908, in its conclusions makes the points: 1. Much of the typhoid fever in the city is imported; 2. Many cases are contracted through contact with persons, or with articles handled or soiled by persons in the febrile stage of the disease; 3. Infected milk is one of the important known factors in the spread of the disease in that city; 4. The filtered Potomac River during the typhoid season of 1907 was, according to present bacteriologic standards, of good sanitary quality and, so far as could be ascertained, was not responsible for the spread of the infection. In the season of 1907 there were 200 cases less than in that of 1906.

Professor J. B. Smith, Sc. D., entomologist, of New Brunswick, made an exceedingly interesting and instructive address, illustrated with many slides, on "The Progress of the Mosquito Extermination Work in New Jersey." He spoke of the changed attitude of the intelligent public from skepticism to firm belief as to the transmission of malaria and yellow fever, through the agency of the mosquito, and as to the ultimate success of the work of extermination. The progress made during the brief period of effort is simply wonderful as set forth in this address. Three hundred and fifty thousand dollars was appropriated by the State, and although only about \$45,000 was actually available up to the beginning of the fiscal year, and with that amount all the salt marsh from Jersey City to the head of Barnegat Bay has been cleaned out, Jersey City, Newark and Elizabeth having nobly contributed toward the work. He also spoke of progress in the manner of doing the work, in the improvement of implements, etc.

The total acreage treated up to November 1, 1908, is 17,620; total number of feet of ditching, 2,394,174. He also dwelt upon the greatly increased productiveness of the land drained. He closed with a satisfactory explanation of the unusual swarms of the common house mosquito during the past season.

The presentation of the subject of "The Sanitation of a Clean Mind and a Happy Disposition," by Rev. H. M. Gesner, of Atlantic City, was a literary gem which the space at our disposal compels us to forego that abstract of it which doing justice to it would require. We give one of his paragraphs of introduction:

"The end of sanitary science is the well-being of man, to be preserved and promoted by attention to his external environment. Now the subject upon which I am to speak is likewise the well-being of man, to be preserved and promoted by giving due attention to what we may

term his internal environment. In other words, a man lives in a world of thought as much as he lives in a world of things, and what he thinks of affects his well-being quite as much as what he eats and drinks." His address will be published in the New Jersey Sanitary Association's annual report.

Harry M. Herbert, C. E., of Bound Brook, read a paper on "Pollution of the Delaware River: Its Cause and Remedy." He spoke of the Delaware River as interesting sanitarians from three standpoints—as associated with the land of the State of New York, New Jersey and Pennsylvania; as used for public water supply by many towns; and as looked upon as a natural outlet for sewage and other refuse of towns located thereon. The sources of pollution were then referred to; the cities, towns—large and small—which discharge untreated sewage into its waters; the factories, creameries, and tanneries which discharge their waste products into the stream of its tributaries; private drains, privy-vaults, garbage, etc. He gave several cases. "Including Philadelphia and Camden, there is discharged into the Delaware River and its tributaries at and above this point approximately 188,721,000 gallons of raw sewage per day; and as the discharge of the river during the dry period is only about 1,283,000,000 gallons, it can be truly said that this water constitutes both meat and drink." The pollution by railroad trains when crossing bridges over the river or its tributaries was referred to as offering a broad field for the transmission of disease and the outbreak of typhoid at Scranton, where a reservoir was polluted thus by material coming from trains. Mr. Herbert then dwelt on the question of remedy, speaking of the great importance of education of the public; suitable system for the disposal and purification of sewage; inspection of rivers and prevention of minor pollutions by individuals. But in addition strict supervision of the plants in operation must be maintained. Then, to insure complete safety, it is necessary to filter the water supplies taken from the river.

E. Knichling, C. E., of Brooklyn, N. Y., presented an able paper on "The Modern Treatment of Sewage." He spoke of treatment as synonymous with purification, as usually regarded, and that complete purification, by artificial methods, as being practically impossible because the cost makes them financially prohibitive. We have to be content, therefore, with a partial purification. Twenty years ago the conclusion was that sewage could be properly purified only by filtration or slow percolation through land. Newer methods are essentially biological in character; progress in these methods had been essentially empirical, with numerous variations and results achieved. The best method of treating the sewage of a given city can be determined only by careful experiment, and the continuance of such method depends on the nature of the industries that may locate in the city in the future. Mr. Knichling considered what sewage consists of; and said that in its treatment the aim is to remove all of the suspended and insoluble heavy matter, and to convert the dissolved putrescent organic matter into compounds which will be comparatively non-putrescible, thus producing a clear and odorless liquid effluent which will also contain a smaller number of bacteria than originally. The methods adopted formerly were in the hands of

engineers, but chemists were soon called in; a great advance has since been made, but as the new methods are usually very expensive, the problem of an economical solution still remains for solution. He then dwelt upon the difficulty encountered in this solution, and the efforts made in different directions to remove suspended matter from the sewage, giving illustrations of methods adopted abroad and in this country.

The last paper presented was by James Owen, C. E., of Montclair, on "The Prevention of Dust on Highways." Mr. Owen commented on the importance of this subject, especially since the advent of the automobile and its extensive use on the improved highways of the country. He contrasted the old-fashioned country roads with the new and the different characters of the dust—from impalpable powder to small particles of mineral matter and the damage of the latter to human beings, animals and farm products, etc. Its effects on the householder, compelling closed windows and doors in hot weather, on clothes, carpets, etc.; on the farmers, rendering grass unsuitable for pasturage, on growing plants, vegetables, fruits, lessening value of lands. Dust as the carrier of germs was considered; tests of dusts in streets of Paris, and in the country outside of the city, were made, showing—in the city, six billions per cubic foot, in country, 864 millions; the bacteria were, respectively, 20 per cubic foot in the city to 2 in the country. The effect of the gritty dust on the nasal membrane and lungs was referred to. Mr. Owen then referred to the different kinds of pavement. The hard road, so-called, was not the main point, but an elastic or resilient surface should be attained. The elimination of dust was considered under two heads: prevention and palliation—to prevent the creation of dust, or of its becoming a nuisance. The prevention was by coal tar, asphalt and crude oil; the relative merits of these were discussed. As palliatives there were considered the water sprinkling in cities, crude petroleum, asphalt oil, water-gas, tar and various emulsions of oil. In Boston it was found that crude asphalt oil, costing 6 cents per square yard, lasted about a year; that a mixture of oil and water-gas would last the season at a cost of 3 or 3½ per square yard. Other mixtures as used abroad and in this country were described. Mr. Owen closes with the suggestion: "All main roads in the future should be constructed with an elastic medium, either of asphalt or tar; all subsidiary roads, with congested population, should be treated in the same way in construction, and when permanent repairs are necessary, in the identical manner, a palliative being used until repairs are made. Will this cost more money? Initially, perhaps, yes; finally, positively no. Whatever extra cost may be entailed on first construction would be wiped out in the first two or three years, and a constant saving would ensue for all the future."

The reports of the various committees showed a year of good work and that the past two years have given evidence of increasing life and influence—62 new members were elected at this year's annual meeting. The following officers were elected for the ensuing year:

President William G. Schauffer, M. D., first vice-president, Rudolph Hering; C. E., Montclair; second vice-president, Edward Guion, M. D., Atlantic City; third vice-president, Professor John B. Smith, Sc. D., New



Brunswick; secretary, James A. Exton, M. D., Arlington; treasurer, George P. Olcott, C. E., East Orange; chairman of Executive Council, Morris R. Sherrerd, C. E., Newark; Executive Council, Drs. D. E. English, W. H. Shipps, T. W. Harvey, H. C. H. Herold, A. C. Hunt, R. H. Parsons, B. V. D. Hedges, A. W. Bailey, T. W. Gray, G. E. McLaughlin, H. H. Davis, Joseph Tomlinson, Alexander Marcy, Jr., L. M. Halsey, Hon. W. J. Harrison, Professor E. B. Voorhees, Sc. D., Stewart Hartshorn, J. W. Griffen, H. B. Francis, T. F. Appleby, Charles J. Fisk, Clyde Potts, C. E., J. S. Westcott, J. B. Betts, W. C. Smallwood.

Honorary Members of Council—The ex-presidents: Professor C. F. Brackett, M. D., LL.D.; James M. Green, Ph. D.; William K. Newton, M. D.; Henry Mitchell, M. D.; Dowling Benjamin, M. D.; George P. Olcott, C. E.; C. Phillips Bassett, C. E.; Addison B. Poland, Ph. D.; David C. English, M. D.; G. K. Dickinson, M. D.; Shippen Wallace, Ph. D.; James Owen, C. E.; Vernon L. Davey, Ph. D.; Daniel Stroock, M. D.; Herbert B. Baldwin, Ph. D.; H. Brewster Willis; John L. Leal, M. D.; M. N. Baker, C. E.; Norton L. Wilson, M. D.; H. M. Herbert, C. E.; John B. Duncklee, C. E.

### THE SERUM DIAGNOSIS OF SYPHILIS IN ITS RELATION TO NERVOUS DISEASES.

#### Technic of the Wassermann Reaction: Its Practical Application With Reference to Diagnosis, Prognosis and Treatment of Nervous Diseases.

Dr. E. Castelli: 1. From the social standpoint, the serum diagnosis of syphilis represents one of the greatest achievements attained by medicine at the present time. The role played by syphilis in the life of mankind requires no explanation. The highest co-efficiency to degeneracy and insanity is created by syphilis.

2. If we were now in a position to tell our patient that notwithstanding his previous syphilitic infection he could marry and create a healthful progeny we would certainly have at our command a tremendous factor for benefiting a large proportion of our fellow beings.

3. If we could establish the fact that syphilis is curable, and did not hang like the sword of Damocles over a man's physical and mental future, again medicine would triumph.

4. From a legal standpoint, the fact that we might be able to aid either the prosecution or the defense with the knowledge that the criminal had a claim on the court's leniency by reason of a previous syphilitic infection, which had produced a derangement of his mental poise, might become an important factor in the administration of justice.

5. The serodiagnosis of syphilis would be a means of differential diagnosis during the pre-paralytic stage, when the general symptoms were indefinite and generally masked by a well-defined neurasthenic syndrome. The differential diagnosis between general paralysis and neurasthenia during this period would represent the real prophylactic warning. The patient, during this pre-paralytic stage, is dangerous to himself, his family and to society at large, and our early recognition of the condition

makes possible the safeguarding of the patient.

6. While the serodiagnosis of syphilis in its present condition is not perfect, and owing to its complicated technic and to the difficulty of procuring the necessary ingredients it is limited to a few privileged students, yet it has the indisputable advantage of furnishing us with a rich amount of positive diagnostic data, and I consider its adoption in the various hospitals and medical institutions not optional, but absolutely necessary.—*A. M. A. Journal*, Nov. 28, 1908.

### The Development and Character of the Wassermann Test.

Dr. C. F. Bolduan, at the October meeting of the New York Neurological Society, said: The Wassermann reaction, briefly outlined, is as follows:

Two tubes are prepared with the following contents:

Tube 1—Extract of the liver and spleen of a syphilitic fetus, representing the syphilitic organism (or antigen), plus serum to be tested.

Tube 2—Red blood cells of sheep or other animal, suspended in normal saline solution, plus serum of a rabbit which has been immunized to the particular red blood cells used.

Complement (a substance necessary to all immune reactions, which existed in the fresh serum of all animals) in the shape of fresh normal guinea-pig serum, is added to Tube 1 and allowed to stand. At the end of half an hour the content of Tube 1 is added to that of Tube 2. If the serum in Tube 1 came from a syphilitic individual, its relation to the extract of antigen is a specific one, and complement will be absorbed thereby; so that, when the contents of Tubes 1 and 2 are joined, no hemolysis of the red blood cells in Tube 2 will take place. If the serum is not from a syphilitic, complement will not be absorbed, but will remain active to cause hemolysis in Tube 2. Hemolysis is observed in the test tube as a tingeing of the whole field with a transparent red color. The red corpuscles have been disintegrated and the hemoglobin liberated. In the absence of hemolysis the solution of red cells remains turbid and opaque. The test, of course, involves numerous controls and a careful standardizing of the hemolytic serum and of the syphilitic extract.

### DISEASES CONVEYED BY INSECTS.

Dr. John B. Huber, in this paper, read at the May meeting of the Medical Association of the Greater City of New York, first discussed the common house fly. The tubercle bacillus, he said, was unquestionably distributed by flies, and it was equally true that flies helped greatly to swell the infant death rate. The infant mortality was greatest in fly time. There were few more congenial culture media for bacteria than milk, especially amidst the uncleanness which obtained in the homes of many poor people. This fluid readily became contaminated with the excreta of flies, and with the noxious matter clinging to their feet. Tuberculosis was thus in some measure contracted by children, as was also dysentery and diarrhoea. Typhoid fever was certainly disseminated by flies, although there were, of course, other sources of infec-

tion. Flies polluted the food and drink by means of the excreta which they carried from dunghoops, manure pits and the like. They bred almost exclusively in fecal matter. They certainly disseminated cholera, and cases of tetanus seemed to have originated through their agency. Dr. Daniel D. Jackson, in the course of his work in behalf of the Merchants' Association in New York, in his report made the statement that the fly captured along the river front carried in its mouth and on its legs 100,000 fecal bacteria. The fly had been behind the large packing boxes down by the wharf, and was on his way to the nearest milk pitcher. We had long looked upon the house fly as a sort of necessary nuisance; a kind of scavenger which people must put up with who would persist in uncleanly habits. It was only recently, however, that we had come to look upon it as a dangerous pest. Dr. Jackson computed that in New York City it was the occasion of some 50,000 cases of sickness, of some 650 deaths from typhoid, and 7,000 deaths from diarrhea. We looked upon typhoid as an autumnal fever. If we counted back two months from the fall rise in typhoid deaths to the time when the disease was contracted, it would correspond exactly to the curve of prevalence of flies and to the curve of rise in deaths from diarrheal diseases of both children and adults. It was, therefore, erroneous to attribute these diseases to hot weather alone. Climatic conditions might predispose by reducing the vitality, but they were not the essential cause; temperature did not produce the specific germ—the casual agent—which invariably accompanied the disease. The activity of the house fly was in proportion to the temperature, and the times when this insect was most active corresponded exactly with the time of contraction of diarrhea and of typhoid fever. The body louse, it would seem, had possibilities of disease propagation beyond the pruritus and the local lesions it occasioned. An epidemic of relapsing fever had been related by Mackie in which the *Pediculus corporis* seemed a causative factor, and it was possibly also a factor in spreading typhoid fever. Among other disease-conveying insects considered in Dr. Huber's paper was the bedbug, which seemed to be associated with epidemics of smallpox. Tubercle bacilli had been found in the blood of the bedbug, and Metchnikoff believed that this insect formed an intermediate host, or at least an agent, for conveying intermittent fever, a disease very common in some parts of Russia.—*Medical Record*.

### ISCHOCYHMYA.

Dr. Frank Hall Murdoch, of Pittsburg, in a paper read before the American Gastroenterological Association, defined ischocymia as an affection characterized by the constant presence of food in the stomach, even in the fasting state. It might be acute or chronic. Whether acute ischocymia, or acute dilatation of the stomach, as it was termed by Boas, Hunter, and others, was due to a paralysis of the gastric muscles, or to a spasmodic contraction, or to both, was as yet undecided. It was usually brought on by some gross error in diet, though it occasionally followed chloroform anesthesia. Out of 64 cases known, 47 proved fatal. Of the total num-

ber of cases, 29 followed chloroform anesthesia, and in eleven of these the operation had not involved the abdomen, but was at points remote from it. The chronic form was caused (1) by mechanical obstruction of the pylorus; (2) by absolute or relative weakness of the expulsive forces; in other words, atonic conditions of the muscularis. Usually, in ischocymia resulting from stenosis of the pylorus, only the coarser particles of food were found in the stomach in the morning before the patient had eaten anything, the finer particles and the liquid contents having passed into the intestine. On the other hand, when stagnation of food was due to atony of the gastric musculature, the coarser particles of food would pass through the pylorus, and only a small quantity of the finer particles would be found in the stomach in the morning before the patient had taken any food. In the treatment of ischocymia due to mechanical obstruction of the pylorus, surgical interference was demanded if the obstruction was due to malignant stenosis, to benign stenosis of high degree which would not yield to medical treatment, to adhesions of the pylorus to neighboring organs, to cicatricial bands, or to tumors which by pressure obstructed the outlet of the stomach. Formerly operation was considered necessary in all cases of benign stenosis of the pylorus, of whatever degree, but now we know that such was not the case, for under proper medical treatment, including diet and lavage, many patients entirely recovered.—*Medical Record*.

### Obituary.

BABBITT—In Orange, N. J., November 23, Dr. George E. Babbitt, of injuries received from being thrown from his buggy. He was born in Madison, N. J., forty-nine years ago and was graduated from the Medical Department of the University of Pennsylvania. He had been in practice in Orange for five years.

KNAPP—In Hackensack, N. J., December 3, after a short illness, Dr. Louis P. Knapp. Dr. Knapp was born in 1868, and was graduated from the College of Physicians and Surgeons, New York, in 1891, after which he studied in Berlin and Heidelberg.

McCOSH—In New York City, at the Presbyterian Hospital, December 2, Dr. Andrew J. McCosh, from injuries received in a runaway accident four days before. He was 50 years of age. Dr. McCosh was one of the most prominent surgeons of the East. Dr. McCosh was a son of the late President James McCosh, of Princeton University. He received his A. B. and A. M. degrees from Princeton University, was graduated from the College of Physicians and Surgeons, New York City, in 1880, and was given the honorary degree of LL.D., by Columbia University in 1905, and by Princeton University in 1906. He took a course of postgraduate study in the University of Vienna in 1882, and in 1883 began practice in New York City. He served his alma mater as clinical lecturer in surgery and later as professor of clinical surgery. For the last nineteen years he was a member of the staff of the Presbyterian Hospital as visiting surgeon, attending surgeon, and



surgeon-in-chief; he was also attending surgeon to Roosevelt Hospital. His society memberships included the American Medical Association, the American Surgical Association, International Surgical Society, and American Society of Clinical Surgery. At the recent meeting of the International Medical Congress he read an interesting and important paper on peritonitis. Dr. McCosh won distinction not as a specialist, but as a general surgeon. While going on a professional errand November 28, one of his horses became frightened at an automobile, the buggy was overturned, and Dr. McCosh was dragged in the wreckage. He was taken to Presbyterian Hospital, where it was found that he had suffered a fracture of the base of the skull, a compound fracture of the clavicle, and other injuries, which, together with a pneumonia that developed from the exposure, caused his death four days later.

**WEST**—In Jersey City, October 13, 1908, Dr. John E. West, aged 65 years. He had been a resident of the Eighth Ward, that city, for more than twenty years. He had just returned to his home from a meeting of the Practitioners' Club, which was attended by over forty doctors at the residence of Dr. G. E. McLaughlin, when he was taken ill and told his son to send for Drs. McLaughlin, Bull and Mallalieu, who quickly responded. Dr. West passed away while the physicians were endeavoring to prolong his life. About a month before Dr. West had a similar attack as he was about to enter the Jersey City Club building. Drs. McLaughlin and Pyle were at the clubhouse when he fell unconscious and attended him.

Dr. West was born at St. Clairsville, Belmont County, Ohio, March 29, 1843. He graduated from the Medical College of Ohio, Medical Department, University of Cincinnati, in 1867, and has practiced medicine ever since—a period of more than forty years. He is survived by three sons—Charles W., Walter C. and William W. West. He has been president of the Hudson County Board of Health for ten years, and a member of the Hudson County Medical Society, the Board of United States Pension Examiners, Van Houten Post, G. A. R., and Lodge No. 47, F. and A. M. During the Civil War, Dr. West served as a member of the surgical staff of an Ohio regiment. He was a life-long Republican. As Dr. McLaughlin remarked, "His death takes from among us a man whom we all loved; Dr. West was a grand old man."

## Personal Notes

**Dr. A. W. Condict**, of Dover, who has been confined to his house by illness, is reported better, and is resting at Atlantic City.

**Dr. Gordon K. Dickinson**, of Jersey City, who has had an attack of pneumonia, and has since recovering been resting at Old Point Comfort, has returned home and resumed practice.

**Dr. H. E. De Bois**, North Plainfield, has been elected a member of the American Medical Association.

**Dr. D. E. English**, Millburn, read a paper at the A. M. A. annual meeting on "The Development of the Infantile Stomach." He also recently read a paper on "Rachitis" before the Summit (N. J.) Medical Society. Reprints of these have been issued.

**Dr. S. B. English**, Superintendent State Sanatorium, read a paper at the State Sanitary Association meeting on "Home and Sanatoria Treatment of Tuberculosis."

**Dr. E. L. B. Godfrey and Wife**, Camden, are spending the winter months at Pasadena, Cal.

**Dr. John L. Leal**, Paterson, presented the subject of "The Necessity for School of Instruction for Public Health Officers" at the annual meeting of the State Sanitary Association, Lakewood.

**Dr. Edwin D. Leidy**, of Flemington, who has been away from his home several weeks for the benefit of his health, having been painfully injured in a fall, has returned home and resumed practice.

**Dr. Philip Marvel**, Atlantic City, presented the subject of "The Proprietary Medicine Question" before the Baltimore, Md., Society at its annual meeting, December 1st. His paper on "Hyperpyrexia in Children: Its Cause and Treatment," read at the annual meeting of the A. M. A., Chicago, 1908, is printed in the *A. M. A. Journal* of December 5th.

**Dr. Henry Mitchell and Wife**, of Asbury Park, are spending a few weeks in their winter home in Florida.

**Dr. Victor Mravlag**, Elizabeth, was elected Mayor of that city by a large majority, although the opposite party is usually victorious.

**Dr. Richard C. Newton**, Montclair, has an article in *The Dietetic and Hygienic Gazette*, December, 1908, on "The Diet of Some Strenuous Persons." He also read a paper before the New Jersey Sanitary Association on "Medical and Sanitary Inspection of Schools."

**Dr. E. A. Reiley**, Atlantic City, has returned from a trip to Europe and resumed practice.

**Dr. W. G. Schauffler**, Lakewood, read a paper on "Sanitary and Medical Inspection of Schools," at the State Sanitary Association's annual meeting.

**Dr. Theodore Senseman**, Atlantic City, read a paper at the annual meeting of the New Jersey Sanitary Association on "After-care of the Discharged Patient," in the Symposium on Tuberculosis.

**Dr. Ambrose Treganorvan** was elected Mayor of South Amboy at the last election.

**Dr. Norton L. Wilson**, Elizabeth, at the N. J. S. A. annual meeting, discussed the subject of "The Prevention of Dust on Highways" from the viewpoint of the specialist on rhinology. His paper before the Union County Society on "The Affections of the Ear Due to Adenoids," appears in this issue of the Journal.

## Public Health Items.

### HEALTH MATTERS IN THE PRESIDENT'S MESSAGE.

President Roosevelt in his annual message to Congress makes the following recommendations in regard to a National Health Bureau: "It is highly advisable that there should be intelligent action on the part of the nation on the question of preserving the health of the country. Through the practical extermination in San Francisco of disease-bearing rodents our country has thus far escaped the bubonic plague. This is but one of the many achievements of American health officers; and it shows what can be accomplished with a better organization than at present exists. The dangers to public health from food adulteration and from many other sources, such as the menace to the physical, mental, and moral development of children from child labor, should be met and overcome. There are numerous diseases, which are now known to be preventable, which are, nevertheless, not prevented. The recent International Congress on Tuberculosis has made us painfully aware of the inadequacy of American public health legislation. This nation cannot afford to lag behind in the world-wide battle now being waged by all civilized people with the microscopic foes of mankind, nor ought we longer to ignore the reproach that this Government takes more pains to protect the lives of hogs and of cattle than of human beings. The first legislative step to be taken is that for the concentration of the proper bureaus into one of the existing departments. I, therefore, urgently recommend the passage of a bill which shall authorize a redistribution of the bureaus which shall best accomplish this end."

The message contained also the following recommendation regarding hospital ships for the navy: "Two hospital ships should be provided. The actual experience of the hospital ship with the fleet in the Pacific has shown the invaluable work which such a ship does, and has also proved that it is well to have it kept under the command of a medical officer. As was to be expected, all of the anticipations of trouble from such a command have proved completely baseless. It is as absurd to put a hospital ship under a line officer as it would be to put a hospital on shore under such a command. This ought to have been realized before, and there is no excuse for failure to realize it now."

### Public Health and Marine Hospital Service —Examination of Applicants.

A board of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine Hospital Service, 3 B street S. E., Washington, D. C., Monday, January 11, 1909, at 10 o'clock A. M., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine Hospital Service.

Candidates must be between 22 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The following is the usual order of the ex-

aminations: 1, physical; 2, oral; 3, written; 4, clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate. The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists in examination in the various branches of medicine, surgery and hygiene.

The oral examination includes subjects of preliminary education, history, literature and natural sciences. The clinical examination is conducted at a hospital, and, when practicable, candidates are required to perform surgical operations on a cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Promotion to the grade of surgeon is made according to seniority and after due examination as vacancies occur in that grade.

Assistant surgeons receive \$1,600, passed assistant surgeons \$2,000, and surgeons \$2,500 a year. Officers are entitled to furnish quarters for themselves and their families, or, at stations, where quarters cannot be provided, they receive commutation at the rate of thirty, forty, and fifty dollars a month, according to grade.

All grades above that of assistant surgeon receive longevity pay, 10 per cent. in addition to the regular salary for every five years' service up to 40 per cent. after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

### Report No. 2 on the Origin and Prevalence of Typhoid Fever in the District of Columbia, 1907.

(By Drs. M. J. Rosenau, L. L. Lumsden and J. H. Castle, U. S. Public Health and M. H. S., published as Bulletin No. 44, 1908.)

The conclusions of the authors are that much of the typhoid fever in the District of Columbia is imported. Many cases are contracted through contact with persons or with articles handled or soiled by persons in the febrile stage of the disease. The especial prevalence of the disease among children in the District has an important bearing on the spread of the infection by contact. Infected milk is one important factor in the spread of the disease in the District. The Potomac water, filtered, May to September, 1907, was bacteriologically, of good standard quality and apparently not responsible for the spread of the disease. In the typhoid season of 1907 there were about 200 less cases than in the 1906 period. This improvement was probably due to the improvement in the quality of the drinking water.



The authors recommend that suspected cases should be treated as contagious and dangerous to the community; they recommend isolation, placarding and prompt disinfection of discharges and bedding, etc. Laboratory facilities should be provided free of cost to aid physicians in the early diagnosis of the disease and to determine when persons who have had the disease are no longer a menace to public health by the discharging bacilli. Milk should be certified, inspected or pasteurized, under official surveillance, especially during the typhoid season. There should be a law prohibiting the handling or sale of milk or milk products in any place where contamination is liable to occur. There should also be a law prohibiting the care of a case of the fever in any house where food or beverages liable to convey the infection are sold or prepared for sale. Additional storage reservoirs should be constructed, or a coagulant be used during periods of high turbidity, in order to assure a water supply of satisfactory purity throughout the year.

#### STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

##### Monthly Statement of Mortality, November, 1908.

There were 2,602 deaths reported in New Jersey during the month ending November 15, 1908, a remarkably low number for this season of the year. By ages there were deaths as follows: Under 1 year, 558; 1 to 5 years, 204; over 60 years, 722.

The death-rate from typhoid fever and other communicable diseases continues low; however, pneumonia and diseases of the respiratory system show the usual increase expected as the winter months approach. The number of deaths from the diseases in question for the month ending November 15, 1908, compared with the average for the previous twelve months are as follows, the averages enclosed in parentheses:

Tuberculosis of lungs, 275 (297); tuberculosis of other organs, 42 (50); pneumonia, 183 (247); other respiratory diseases, 133 (181).

The following shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending November 15, 1908, compared with the average for the previous twelve months, the averages being enclosed in parentheses:

Typhoid fever, 40 (34); measles, 6 (13); scarlet fever, 19 (33); whooping cough, 9 (21); diphtheria, 41 (46); malarial fever, 3 (3); tuberculosis of lungs, 275 (297); tuberculosis of other organs, 42 (50); cancer, 118 (129); cerebro spinal

meningitis, 25 (27); diseases of nervous system, 292 (363); diseases of circulatory system, 297 (319); diseases of respiratory system (pneumonia and tuberculosis excepted), 133 (181); pneumonia, 183 (247); infantile diarrhoea, 160 (222); diseases of digestive system (infantile diarrhoea excepted), 189 (197); Bright's disease, 182 (206); suicide, 25 (38); all other diseases or causes of death, 563 (604).

##### Laboratory of Hygiene, Division of Food and Drugs.

During the month ending November 30, 1908, 624 samples of food and drugs were examined in the State Laboratory of Hygiene. We note the following found below the standard: 4 of the 203 samples of milk (No. of suits instituted, 2); 19 of the 28 of butter (18 suits); 4 of the 30 of red and white pepper; 3 of the 10 of lime water; 4 of the 9 of tinct. iodine; 4 of the 66 of cider vinegar. Up to standard were all the 4 specimens of chocolate and 5 of cocoa; all 96 of spices except the 4 above mentioned; all the 18 of honey; 3 of coffee; all of the 31 of cream tartar and 34 of witch hazel.

During the month ending November 30, 1908, 90 inspections were made in 55 cities and towns.

The following articles were inspected during the month but no samples were taken: Milk, 841; butter, 277; foods, 499; drugs, 134. Other inspections were made as follows: Milk wagons, 409; milk depots, 105; grocery stores, 265; drug stores, 36; milk cans, 2,299.

##### Laboratory of Hygiene, Bacteriological Department.

Specimens for bacteriological diagnosis: From suspected cases of diphtheria, 358; tuberculosis, 275; typhoid fever, 166; malaria, 13; miscellaneous, 18.

##### Division of Sewerage and Water Supplies.

Total number of samples analyzed in the laboratory, 120; public water supplies, 42; private wells, 28; dairy wells, 24; creamery supplies, 3; sewage samples, 13.

Inspections—Public water supplies inspected at Bordentown, Perth Amboy, Dover, Camden, Woodbury.

Sewage disposal plants and systems inspected at Colingswood, Brown's Mills, Medford, De Laval Co., Perth Amboy, Woodstown, Asylums, Spring Lake, Princeton, Camden, Newton, Atlantic City, Hackettstown, Ridgewood, Essex Fells, Palisades Park.

Cases of special pollution investigated, 3.

Stream inspection continuing on Raritan, Delaware and Shrewsbury Rivers.

Number of persons summoned before the board, 73.

Suits started in Attorney-General's office, 12.

The JOURNAL will be glad to print original papers from any source, preferably from members of the State Society, provided that they shall be of sufficient merit and shall be contributed to this paper exclusively.

Anonymous communications will not be published, but the name of the author of a communication will be kept secret if the editor is requested to do so.

The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer. We cannot promise to return unused manuscript.

Authors may obtain reprints of their papers at cost, provided a request for them be written on the manuscript.

Matter received after the 20th of any month cannot appear in the next issue of the JOURNAL.

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## THE DRINK HABIT AND ITS TREATMENT.\*

By **Charles A. Rosenwasser, M. D.,**  
**Newark, N. J.**

Attending Physician to the Presbyterian Dispensary; Member of Adjunct Staff of St. James Hospital; Vice-President of the Dependency and Crime Commission of the State of New Jersey.

I desire to ask your thoughtful consideration this evening of a subject which is an extremely important one, and one with reference to which very little is known either by the medical profession or by the laity. Few, if any, of you have ever read a scientific article on "The Drink Habit and Its Treatment." The text books do not give us much assistance in our search for light on this subject and the few monographs which have appeared from time to time have not, as a rule, aroused the interest which the subject merits.

During the past four years I have devoted myself almost exclusively to the study and treatment of inebriates, and this paper is based upon my personal experience. It is written in the hope of arousing the interest of the medical profession, and with the conviction that ere long this subject will receive as much attention from the medical profession and the laity as is now accorded the exhaustive subject of tuberculosis.

Ages and ages ago some one made the

interesting discovery that the drinking of fermented liquors gave rise to pleasurable sensations. The liking for such sensations being perfectly natural, the drinking of fermented liquors became a custom. All people were not affected alike by these beverages. Some drank extremely rarely and moderately, while others found a perfect utopia in their cups, drank freely, then to excess, and finally became drunkards.

To the learned men of the day it became apparent that the use of fermented liquors was injurious to the health and morals of the nation, and a vigorous campaign in the cause of temperance was begun. Temperance lectures were held, the people were taught the baneful effects of liquor upon the system, and they were exhorted to become total abstainers. Drunkenness was severely punished, the methods at times being inhuman and barbarous. Habitual drunkards were put to death, sometimes by the gruesome method of pouring molten lead down the throat. However, in spite of all agitation and the horrible punishment inflicted upon the unfortunate victim of the drink habit, the use of fermented liquors has become almost universal and it seems that there is truth in the assertion that the proportion of drunkards is now higher than at any time in the history of the universe.

What is the reason for this condition? Simply this: The continued use of alcoholic beverages or medicines, irrespective of the kind or mixture taken, whether it be beer, whiskey, wine, gin, or the fancy liquors, or patent medicine, gives rise after a shorter or longer period to an abnormal condition of the nervous system in which

\*Read at the 142d annual meeting of the Medical Society of New Jersey, Cape May, June 20, 1908.



the nerves and organs will not functionate properly unless stimulated by alcohol. If this abnormal condition continues for a sufficient length of time the habit of taking alcoholic drinks becomes firmly established, and the victim has acquired a disease. The disease is called alcoholism, and the physical demand for the stimulant is spoken of as alcoholic craving.

Alcoholic craving occurs in various degrees of severity. It may be slight, and satisfied by a few drinks daily, or so severe that it is beyond the imagination of a normal person. A patient suffering from an advanced case of alcoholism said: "Were a keg of rum in one corner of a room, and were a cannon constantly discharging balls between me and it, I could not refrain from passing before that cannon in order to get that rum." Another said, "If a bottle of brandy stood on one hand, and the pit of hell yawned on the other, and I were convinced I should be pushed in so sure as I took one drink, I could not refrain." This intense craving, gentlemen, is what we have to fight in dealing with a well-developed case of drink habit. Alcoholic craving never arises of itself, and no one is ever born with a craving for alcohol. The craving comes on only after the system has experienced the effects of alcohol. Alcoholism is, therefore, strictly speaking, not hereditary. The tendency to develop the disease is, however, hereditary. The offspring of alcoholic parents and of highly nervous parents are more apt to develop the disease than are those differently constituted. They are in no danger, however, if they leave alcohol in any form severely alone.

Alcohol, doubtless, plays a greater part in the physical and moral ruination of mankind than almost all other baneful influences combined. By far the greatest number of crimes of violence are committed while the offender is under the influence of alcohol, or by degenerates—the offspring of alcoholic parents. A criminal of the lower type, who is neither a drunkard nor a drug user, nor the offspring of inebriate parents, is a decided rarity. Epilepsy, insanity and degeneracy can in the vast majority of cases be traced to alcohol. In the development of tuberculosis it plays an important role. Inmates of almshouses and similar public institutions are largely alcoholic. It is said that one out of every six or seven deaths is directly or indirectly due to alcoholism—a preventable disease.

There are three great classes of alcohol drinkers: Those who drink to satisfy thirst and simply take alcoholic drinks because they are flavored; those who drink because they find the taste of the drink to their liking; and those who drink for the effect of the alcohol upon the brain—that of a narcotic. The last class is the one most apt to develop drunkenness, but every human being who takes alcohol in any form more or less steadily may at any time develop true alcoholic craving and become a victim of alcoholism. There is only one positive preventive, and that is total abstinence.

There are two great classes of alcoholics—the daily, steady drinker, and the one subject to periodical sprees. The steady drinker usually begins drinking in early youth with an occasional social glass, slowly increases the daily quantity consumed and finally becomes unable to attend to his duties without a bracer, and unable to resist the invitation to have a drink. Sometimes steady drinking follows after years of periodic drinking.

The periodic drinker is found mainly among the brain workers and especially among those who are the offspring of inebriate or nervous parents. In this class of patients the craving for liquor comes on in spells, which may last for a day or two, or for weeks or months. The attack is usually preceded by a period of restlessness, irritability, and change in disposition, the signs in most cases being so marked that the relatives and associates of the patient recognize that the spell is coming. The patient also often recognizes the nature of the difficulty and puts up a strong fight against the physical demand for the stimulant, but unfortunately, owing to the peculiar nature of the disease, he rarely seeks medical aid at this crucial period, and, when he can no longer resist the craving he takes a drink to steady his nerves, really intending to take just one. This one drink arouses the craving in all its fury and the unfortunate victim then wants all the liquor he can get. During the attack he is really mentally unbalanced, and when the attack is over he may remember nothing that he has done or said during the spree. Sometimes the attack ends of itself, but more frequently medical aid is required. The dipsomaniac is an object for pity, for he suffers from a disease which compels him to drink.

How can I tell whether or not I crave alcohol? This question is put to me every

now and then, partly in earnest and partly in jest. To this I answer that there is a very simple way of finding out whether or not one is developing the drink habit. Let the so-called moderate drinker make a firm resolve never again to touch a drop of alcohol in any form. If, after a few days of abstinence, he begins to yearn for a drink and finds abstinence not quite so easy as he thought, if he finds it hard to refuse an invitation to have a drink, and also finds it hard to go about his work without a little bracer, the evidence is conclusive that the habit has begun to fasten itself upon him. Now is the time for the individual who finds himself in this position to put up a strong fight to save himself. If he is in earnest and means business he can overcome the habit. The importance of this point demands emphasis, for if every case of developing alcoholism could be reached at its beginning the results of treatment would, of course, be more satisfactory, for naturally the longer the disease lasts the harder it is to cure, and, if neglected, cure will become impossible.

In attempting to cure a victim of the drink habit we usually encounter at the outset a great obstacle in the peculiar nature and make-up of the patient. It is always difficult, and, at times, impossible, to get him to see himself as others see him. The nature of the disease is such that the patient is usually quite satisfied with himself and does not realize that he is doing himself an injury and that he is developing a disease which, if unchecked, will bring degradation and sorrow upon himself and his loved ones. His friends should, therefore, approach him tactfully and with great patience. He must be brought to realize that he is in the hands of friends who recognize that he is in need of medical attention, and he must not be allowed to feel that he is being looked down upon as a drunkard. They should explain to him that his actions lead them to believe that his nervous system is in an unhealthy condition, and along these lines should try to win his confidence and induce him to place himself in charge of a physician for a thorough course of treatment.

The treatment must cover a period of months and consists essentially in thoroughly studying the patient and applying in each case the remedies called for. There is no remedy or plan of treatment which will cure all cases. There is a specific for

the disease. Every case must be studied and treated as an individual. The underlying cause may be very difficult to locate or, on the other hand, may very easily be discovered. For example, I have had two cases where the craving for liquor seemed to be due to the presence of intestinal parasites and in which cure followed their expulsion. It must also be remembered that the drink habit often masks insanity. Thus, a man may drink himself insane, or may drink to excess simply because he is insane and does not realize what he is doing. The possible existence of a complicating drug addiction must also be borne in mind.

Can a victim of the drink habit be cured against his will? Is there anything I can put in the patient's coffee that will take away his desire for alcohol? These are questions which are put to me surprisingly often, usually, of course, by laymen, but occasionally by physicians. The curing of an alcoholic even with his co-operation and earnest desire for restoration is always a difficult matter, and without his co-operation it is an absolute impossibility. Having experimented with almost every known remedy advertised to the public as a cure for alcoholism, I say most emphatically that all remedies claimed to possess the power of curing the drink habit without the knowledge of the patient are frauds, and it is simply a waste of time and money to use them. Aside from the fact that they may do actual harm to the patient, they further do him and his family great injustice in destroying confidence, removing the hope of cure, and by keeping the patient away from those physicians who are making honest efforts to do something of value for the inebriate. In most cases the treatment of the drink habit resolves itself into nothing more nor less than the treatment of an aggravated case of neurasthenia. A condition which will tax your skill to the utmost and exhaust your patience, but, nevertheless, one in which you can achieve success in a gratifyingly increasing number of cases if you will go about it in the right way.

Dubois says, "The nervous patient is on the path to recovery as soon as he has the conviction that he is going to be cured; he is cured on the day when he believes himself cured." Gentlemen, in no nervous disease does this statement hold so true as it does in the drink habit. With the wise statement of Dubois as your watchword, begin your campaign. Your first step in



dealing with the patient is to win his confidence. Without having succeeded in this you can do nothing; but having succeeded, you can accomplish marvels. This patient demands prompt action without hesitation. You must convince him from the very start that you know what you are talking about, that you can promptly and effectively destroy his craving for alcohol, that you can put him in such a physical condition that he will not suffer for the want of alcohol and will indeed get along better without it, that his nausea and vomiting will promptly subside, that the restlessness will give place to calm, that the sleeplessness will be replaced by peaceful slumber, and that you will leave no stone unturned to help him get well, and then will show him how to stay well. You must make him feel that your entire aim in life for the time being is to help him win his way to health, usefulness and happiness. In short, your treatment at the beginning is purely psychic.

Having won your patient's confidence and having succeeded in getting him into the proper frame of mind, you must proceed to make good your promises. This you can do with the aid of remedies available to every physician and without resorting to any secret remedies or secret systems of cure and, what will be news to many of you, you can do this in a surprisingly large number of cases without requiring the detention of the patient, he being able to go about and attend to his business. This last fact is an extremely important one when one considers its many advantages. Under such a plan of treatment many patients can be induced to undergo a course of treatment who never would consent to place themselves under restraint, and hence we are able to get in our work in the early stages of the disease and before conditions are so bad that the possibility of cure is precluded. However advantageous and necessary prolonged detention in a sanatorium may be, the fact remains that the disease must be very far advanced before the patient or his family will consent to his leaving home. It is also a fact that many men break down during periods of great business stress, when to leave their business may mean that the ruin which threatens them will become actual if they are not on deck, even though wounded. The financial conditions must also be considered. Not only are sanatorium treatments expensive, and, therefore, available only to those blessed

with worldly goods, but during detention the earnings stop as a rule and treatment, therefore, becomes doubly expensive. A case of everything going out and nothing coming in.

Treatment in order to be effective must be conducted systematically. My patients report to me three times daily during the first two or three days, then twice a day for the balance of the first week; during the next two weeks they report once daily; and during the fourth week every other day. I then have them call once a week for a month, then once every two weeks, then once every month for as long a time as I can get them to come. I lay special stress upon teaching the patients and those in touch with them the importance of having the patient return at once for advice on the first indication that ground is being lost. I never tell my patients what medicine they are receiving, and, as far as possible, give them every dose myself in order to be certain that instructions are being followed and to prevent self-drugging—a condition which this class of patients is very prone to develop.

The treatment, of course, depends upon the conditions present. For example, I never waste time arguing with a man who is too drunk to comprehend. This man I usually give a hypodermic of apomorphine and then meet indications as they arise. In ordinary cases such as presented by the patient who comes to me saying that he recognizes that he has the drink habit and is anxious to overcome it, my treatment is as follows: I urge the patient to stop drinking at once and assure him that if he gives the medicine a chance to act the craving will soon become bearable and in a day or so will disappear entirely. I tell him that "tapering off" only prolongs the agony and is, indeed, just like cutting off a dog's tail by inches. At the outset I secure free purgation by compound cathartic pills fortified with podophylin and keep the bowels rather loose for the first few days. I give atropin, grain 1-100 and push it to the point of toleration and maintain it there about four days, then give it in diminished doses twice daily for the remainder of the week; extract digitalis, one-half grain three times daily for two or three days, then diminishing the dose and discontinuing at the end of the first week unless indicated; arsenious acid, 1-20 grain three times daily for a few days, then twice daily for the balance of the week; ergotin, 4 grains three times daily for two or three

days, then 2 grains twice daily for the balance of the week; and, very exceptionally, when there is great prostration, one-half to one drachm of fluid extract cocoa erythroxylon repeated several times as indicated. As sedatives and hypnotics, bromides, chloral, sulphonal, trional, veronal, paraldehyde, and apomorphine. For vomiting due to alcoholic gastritis there is nothing to compare in value with calomel given in quarter-grain doses every half hour for ten doses and following five hours after the last dose with a Seidlitz powder. For gnawing in the stomach I use infusion of quassia, one-half ounce every hour or so, or milk of magnesia, 2 drachms every hour or so.

During the second and third weeks I give fifteen grains of red extract of cinchona suspended in glycerine and water every night and morning. Beginning with the fourth week, and continuing for several months, my patients receive a tonic pill containing phosphorous, strychnine, iron, arsenic, quinine and cascara. All medication is given by mouth except apomorphine, which is given hypodermically. These are the drugs upon which I pin my faith because I have been convinced of their efficacy. You may know of better ones. If so, you will, of course, use what you think best. But whatever you use, always bear in mind that it matters not so much what drug you give, as how you give it. Your degree of success will in every case be measured by your ability to tone up your patient's morale. I may be mistaken, but I am strongly inclined to believe that no man can successfully treat the drink habit unless he himself is a total abstainer. You cannot effectively portray to your patient a word picture of the beauties of an abstinent life with the odor of alcohol upon your breath.

The dietetic treatment must also receive your attention. The diet should consist of large quantities of plain, wholesome, nourishing food. The patient should be encouraged to eat freely and at short intervals. Highly spiced articles must be avoided, ancient teachings to the contrary notwithstanding. Meat should not be taken more than once daily, and the closer these patients adhere to a strictly vegetarian diet the better. I tell them to keep their stomachs busy digesting food and it will not bother them for liquor, and advise that on the slightest sign of fatigue or a sensation of emptiness in the stomach, some light nourishment such as milk and crack-

ers, or hot weak tea, or some fruit or nuts, be taken.

A hygienic life, important for the welfare of every human being, is especially to be recommended for the alcoholic. The patient must endeavor to live a quiet, orderly life, free from excitement and worry. He should spend as much time as possible in the open air. The skin should be kept clean and active by the daily bath, either tub or shower, using warm or cold water, according to conditions. Lukewarm baths are best for the weak and cold baths for the strong. A weekly sweat bath will be found of decided benefit to most patients. A moderate amount of physical exercise should be taken daily, and it should be followed by a vigorous rub-down with a coarse towel. The bowels must move daily, laxative foods and remedies being used if necessary. Once a week they should be thoroughly cleansed with a mild saline such as Seidlitz powder.

In dealing with periodical drunkards it is absolutely necessary that we secure the hearty co-operation of the persons associated with the patient, as well as that of the patient himself. They must be taught to recognize the prodromal symptoms of an attack and be urged to seek competent medical advice without delay, for prompt and thorough treatment at this time is usually successful in forestalling calamity. In this stage I induce free purgation with salts and use bromide of soda in large doses. In fact, I look upon most of these cases as manifestations of epilepsy, and in addition to the general treatment outlined above, I deal with these patients the same as I would in a straightforward case of epilepsy. When a spree has begun, every effort should be made to break it, for the longer it lasts the worse is the effect upon the health of the patient and the more difficult ultimate cure becomes. Aside from the patient we must also consider the effects of the debauch upon those about him. In managing the patient during the spree, we must for the time being overlook his wishes and prejudices and deal with him as we would with any patient temporarily bereft of his senses. Restraint for a brief period is frequently demanded.

The craving for liquor having been removed and the patient having been restored to health, it remains with him to so conduct himself that he will remain free from the disease. He must be made to understand that he is so constituted that he will never be able to take alcohol in any



form without again developing the alcoholic craving, and that he will positively relapse if he allows alcohol in any form to enter his system. He must be especially cautioned against such drinks as Hostetter's Bitters, ginger ale and Jamaica ginger, and must also avoid the so-called tonics so widely advertised, as most of them contain alcohol. Should he at any time require the services of a physician, it is important that the physician be informed of the alcoholic predisposition and be asked to prescribe pills, tablets or powders, if possible, for fear that alcohol will find its way into the medicine if fluids are prescribed. In arranging a plan for a new life for your patient be sure to advise him to take up church duties. Religious faith and church attendance, with all the power for good therein, are excellent moral tonics, as you all know.

If the patient is one of a severe type of habitual drunkards, a menace to himself and a terror to his family and neighbors, and if he either refuses to take treatment or is incurable, he should be taken in charge by the authorities and treated as a person incompetent to manage his own affairs.

In the care and treatment of the poor habitual inebriate our fair State is still committing the double sin of omission and commission. The drunkard who falls into the hands of the police is first reprimanded and let go; for a second offense he is usually fined; if he again falls he is sent to the county jail, and finally to the penitentiary. This method of dealing with these unfortunates, many of them more sinned against than sinning, is inhuman and barbarous, a relic of the dark ages. It punishes the parents, wives and children more than it does the victim. It drags a man further down the social scale and does nothing to help him overcome his affliction. How ridiculous it would appear and how inhuman it would be to attempt to cure gout by punishing the victim every time he had an attack. The error is equally great when the attempt is made to combat alcoholism by punishing the victim of the drink habit. The wealthy drunkard is able to secure competent medical aid. Tender hands soothe his fevered brow and kind words soften the pangs of his remorse. How differently fares the poor man. Thousands of such in this State would gladly go anywhere for relief and would earnestly strive to become useful citizens. No sane man wants to be a drunkard. But where

shall he go? What is there for him to do but to drown his sorrow in drink?

In Massachusetts, Iowa and Minnesota, there have been established State institutions for the care and treatment of habitual inebriates. They are being successfully conducted and the reports of their results are most encouraging. Surely the records of the Washingtonian Home, Boston, now in its fifty-second year; that of the Foxboro (Mass.) Hospital, in its sixteenth year, and that of the Trinkerheil Anstalt at Ellikon, near Zurich, in its eighteenth year, show conclusively that the treatment of inebriety has long since passed the experimental stage. For several years I have been urging the establishing of such an institution in this State, and had a bill for the establishment of such an institution presented during the last session of the Legislature. Unfortunately the bill died in committee. The movement, however, has made an army of friends and is being supported by some of the most prominent people in this State. Our Chief Executive has expressed himself in favor of it and I am certain that the day is not far off when New Jersey will have a State hospital for the care and treatment of inebriates.

While a large number of cases can be treated without detention, outside of such an institution, detention under legal commitment in such an institution holds out the only hope for many of these unfortunates. In a fair number of apparently hopeless cases recovery can be obtained, while the incurables can be saved from themselves, can be prevented from being a menace to society, and, above all, can be prevented from propagating diseased and degenerate offspring.

In conclusion, gentlemen, I wish to remind you that alcoholism is a disease usually chronic in nature, and, like other chronic diseases, is prone to acute exacerbations, and to urge upon you the importance of the rational treatment of the drink habit. You will find that some cases can be cured, some can be improved, and some are incurable.

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#### DISCUSSION.

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**Dr. Livingston S. Hinckley, of Newark,** said that the paper from Dr. Rosenwasser's pen is one of universal interest, and that in constructing it the doctor indicated that he had had a liberal experience in this branch of medical work. There is, said Dr. Hinckley, no profession or walk of life that man has encompassed

in which one will not find those who are addicted to the use of alcoholic stimulation; and, while it may be classed as a dangerous acquisition, there are men who have gained in war, in literature, in mercantile pursuits, in professional lines, in enviable fame for their achievements, and whose careers have been marked by an integrity of purpose and brilliancy of thought denoting sound judgment and reasoning capacity, whose lives were not sullied by any reflection upon their character, either in public or in private life.

While at best dram-drinking is admitted by all profound thinkers to be a pernicious habit and undesirable, there are many who, within the lines of temperance, continue it without apparent destructive results, many of whom go through life without either mental or physical abnormality; without either craving for alcoholic stimuli or showing deterioration in mental or physical capacity. But the craving for something to stimulate, under certain conditions, occurring in the offspring of those addicted to the habit, seems to me to strengthen, rather than disprove the view that such craving has a hereditary basis.

The death rate due distinctly to the effect of alcohol requires some consideration. There are so many factors entering into the estimate of its menace to life that one cannot accept it as an exclusive cause.

That crime is committed under the influence of liquor is constantly brought before us; yet those who have studied criminology realize that some of the most atrocious and coolly premeditated criminal acts have been and are committed by human beings in whom or in whose family tree can be found no trace of alcoholic indulgence. Such cases are attributed to degenerate conditions in which alcohol plays no part.

Why a man takes alcoholic stimulants is a question largely confined to individualism. Like physiognomy and other characteristics, it is so varied that no two persons are exactly alike; their natures and physiological and sociological conditions are governed by the environment they eventually reach. Therefore, the proposition for inquiry becomes monumental.

There are few medical men of acute observation whose work has brought them in contact with the working class of a large city who are so radical in their views that they would deny at a time of relaxation from drudgery the allowance of a stimulant which will for the time being bring a glow to the cheek and a pleasurable relief from constant anxiety. We live not for ourselves alone; we must, if charity exists in us at all, permit those not so fortunate as ourselves to enjoy some things which take away even temporarily the distressing sense of self-denial of the material that those in higher walks of life do not feel. Pass through the sweat shops, the hatters' district, and, worst of all, the leather factories, on a hot day, and you will see what, said Dr. Hinckley, he had seen a few days before this meeting, four men ranging in age, so far as he could judge, from 30 to 45. They were standing behind tubs of leather, one wearing glasses. What struck him was the uniform cyanotic pallor on each countenance, a physiognomy which denoted a despairing of the duties of life, with nothing to look forward to

but a daily repetition of this form of labor that they were fated to adopt. The windows were open, the roar of machinery behind them was deafening, the vapors they constantly breathed, and which Dr. Hinckley was compelled temporarily to inhale, were of an odor best classified as vile. These hapless four were evidently doing piece-work for they were very energetic. The thought occurred to him then and there that he could not condemn these men, if they should accept an invitation to a cool draft of beer. It seemed to him that, under such conditions, he would say, let them use their own judgment.

Returning to the question of the drink habit, Dr. Hinckley said that total abstinence is a preventive, but the temptations are on every hand. Until a national edict against the manufacture or sale of alcoholics is obtained, one cannot hope for much relief on this point. Prohibition has met with so much popularity that 40,000,000 of the population of this country have been restrained from taking a drink in public places; but drunkenness does not seem to have proportionally decreased.

Those who have had to deal with excessive cases of drink habit know that the subject of craving will find ways and means to acquire the stimulation. If alcohol in ordinary whiskey cannot be obtained some will resort to tincture of ginger; in one case four ounces was the portion taken in one draught, and this frequently repeated. While at this point of discussion, Dr. Hinckley asked whether the pure food laws and Dr. Wiley's investigation had done much toward the selection or purification of the drink handed out in our large cities. The police have a common expression, when a man is apprehended as a "drunk," "Oh, he got it at a blue front." This means that he obtained libations of a highly intoxicating mixture of alcohol and burnt sugar, to color it. A State inspection of such places would help some.

The proper solution of the drink habit, in his opinion, is education. He believes that proper textbooks, fifteen minutes each week being given to recitations upon this subject in public schools, beginning with children of twelve years of age, would do much for future generations. The subject should also be made a part of the curriculum of High Schools, with efficient tutors to lecture upon it.

The home treatment of persons afflicted with the drink habit who became a menace to themselves and to the safety of their families, Dr. Hinckley had little faith in. All the outline of treatment given by Dr. Rosenwasser, Dr. Hinckley considered very good; but he said that it applies only to cases in which the means provide for personal restraint as well. The failure in his and in others' experience to produce a radical cure, forced him to the opinion that only by extended restraint can a patient be brought to a realization of his infirmity in its true sense, and that only by extended, enforced restraint can such a subject regain, under proper and skillful medical supervision, his normal volition and the reasoning power to govern it.

Dr. Rosenwasser had spoken of the injurious effects of ginger ale, etc., but Dr. Hinckley asked: "What are we to see before us, when we observe the results of aquamania, as intro-



duced in the remarks of Dr. Mason, at Chicago, a few days ago?"

The man who has means to assist him to a temporary or radical cure is all very well, said Dr. Hinckley, but how about the man who has not? Must he be lost? Not if public sentiment and the Legislature of New Jersey can be awakened to the importance of the conditions which confront the public at large. This State has done well in all its charities; the inauguration recently of the hospital for the care and cure of consumptives was a magnificent benefit to her suffering patients. There is no limit to public munificence, and the duty of this society to further the establishment of a State hospital for the cure of alcoholic and other drug dependants is apparent.

Dr. Evans in an address before the New Jersey Conference of Charities and Correction, in 1905, had made a strong plea for ways and means to permit the commitment of habitual drunkards of the indigent classes to hospitals for the insane, under a much less elaborate and expensive form than is now required by the statutes: and with the consent of the board of managers, a bill was introduced into the Legislature in 1903, which passed the Assembly but failed to reach the consideration of the Senate. The address Dr. Hinckley considered well worthy of perusal. He did not, however, think it just, that such cases should be sent to hospitals for the insane. In the majority of instances the subject appears sane enough after a few days or weeks of incarceration, but is not encouraged by association with less fortunate inmates, and the problem confronts the medical director how long a detention in such environment is advisable. Again, the option of such detention is limited by the mental status of such a patient. The result is that a patient thus discharged returns, sooner or later, in the majority of cases, to his former state of inebriety.

Dr. Hinckley's experience, covering nearly twenty years of hospital work, had convinced him that a separate and distinct institution for such cases would be a better remedy, and would convince the most skeptical of its inestimable value. In Newark the matter had been discussed frequently, so many distressing problems having arisen, especially through the department of police, almost daily, as to raise a serious question concerning the proper disposal of such cases. Dr. J. Henry Clark, who has filled the position of police surgeon for over 25 years, says it is one of the most trying tasks of his position.

Alonzo Church, who has had an extended experience in the law pertaining to the commitment of the insane, became interested after a conference with Dr. Rosenwasser, Dr. Evans, Dr. Clark and others; and last winter, after considerable time and attention devoted to the subject he drew a bill which comprehensively covered all the requirements for the establishment of a State hospital for the care of drug-habituates. It was introduced into the Legislature; but, not having the proper boost, it did not go further than the Committee on Bills. It was an act to establish a State hospital for the care and treatment of persons habitually addicted to, or suffering from the effects of, alcoholic drink or of any drug of narcotic order; and to provide for the government thereof, for the commitment

of patients thereto and for their confinement therein. The name selected was the New Jersey Psychopathic Hospital. It was to be governed by a board of eleven commissioners appointed by the Governor. They were to be empowered to select a site, erect suitable buildings and appoint executive officers. It provided for commitment under forms similar to those required for the insane, and supervised by the court ordering the legal restraint. This carefully drawn bill covered eleven pages of printed matter.

Dr. Hinckley would wish to add only one other provision to this bill, and that is a clause permitting of the voluntary commitment of not only drug victims, but psychopaths who feel the approach of mental deterioration—providing, of course, for their proper transfer to hospitals for the insane, if their mental condition should demand it.

If the State Medical Society should advocate it, the measure should be pushed, said Dr. Hinckley, by bringing it to the attention of the county and local medical societies, and to that of the legal committees of the boards of trade in all towns and cities. It is a duty we owe to this unfortunate class of dependants, and it should appeal to every one's sense of justice and mercy.

**Dr. Alex. Marcy, Jr., of Riverton,** said that it seemed to him that no more important subject had been presented at the meeting of the State Medical Society than the one now under discussion. He considered it unfortunate that the Committee on Program had seen fit to place it so near the end of the session. The moment one begins to talk about inebriety, the effects of alcohol, and what it is possible to do for the unfortunate victims, one is not taken seriously, but is pointed out as a crank and one not really interested in the best welfare of humanity. The medical profession, he said, are prone to laugh at the idea that medical men should take an advanced position in regard to this important matter. For this reason, he thought it unfortunate that there were so few in the audience to listen to this important paper.

The paper itself, he thought, needed no discussion, as all must agree with what Dr. Rosenwasser had said, as well as with what Dr. Hinckley had said in opening the discussion. Personally, it seemed to Dr. Marcy that the important thing that the society needed to consider at that time was, What is the duty of the State in regard to this important problem? Certainly, said he, the State owes a duty to these unfortunate victims of the drink-habit; inasmuch as the State makes it possible for alcoholic beverages to be sold under the license of the State, thus becoming a partner in this pernicious traffic. If the State makes it possible for these men to obtain this death-dealing drug, it certainly owes the victims and their families, who suffer untold miseries, something more than the regulation of the habit or of the sale of the articles that produce it. Therefore, the State of New Jersey needs to establish an institution for the special treatment of these cases; it should even go further, and, if possible, prevent the sale of alcoholic liquors. Perhaps, however, said Dr. Marcy, the time is not yet ripe for that. The State does owe the duty of providing some means by which many of these people can be

reclaimed. It is useless merely to recognize the evil effects of alcohol. Dr. Marcy thought it a strange thing that the medical profession and the people generally should be willing to let this evil go on indefinitely, spending large sums of money for the care of the degenerate offspring of the victims and for the care of their own wrecked lives.

**Dr. Drake, of Virginia,** said that he considered the subject intensely interesting. He agreed with what the gentlemen had said, that it is a question to be discussed by medical men. It is a medical question, he said, because if alcoholism is a physical malady, it is a pathological condition. He loved to dwell upon the fact, which he considered very significant and as affording a solution of many questions, that function depends upon structure. Abnormal function implies the existence of abnormal structure. In this way, the heredity of alcoholism can be explained, just as the heredity of insanity can. The pathological condition of the father can be transmitted to his sons, who grow up in a pathological condition. It is a sad thought that the drunkard contains pathological spermatozoa, which can transmit the craving to his offspring. The remembrance of this fact will impress upon everyone the necessity for the prohibition of the manufacture and sale of alcoholic spirits. Dr. Drake believed that the time had come when medical men should stand upon the floors of the various medical societies and condemn this traffic and also explain these conditions to the public, insisting that laws should be made prohibiting the sale and manufacture of liquor. The subject should have a prominent place on the program of every society meeting, because, as suggested by Dr. Marcy, it had come too low down on that of the Medical Society of New Jersey, at a time when too few men were present to listen to the paper and to discuss it. He thought it probable that the ones that were present were those that were so much interested in the subject already that they needed no further information concerning it. The sinners, Dr. Drake said, are the ones to whom this gospel should be proclaimed, and they are not usually present when such subjects are discussed.

**Dr. D. E. English, of Millburn,** said that it is a common remark that man is a creature of habit. Habit means cell-change. He thought that the alcohol habit was as surely present in a man that takes one glass of beer every night at bed-time and cannot be induced to go without it, whether it is harming his health very much or not, as in the man who takes forty glasses a day. He said this in order to bring out what is meant by habit. Not all cases of inebriety are in men with the alcohol habit, although nearly all are. He had seen a few cases that had not the habit. One was in a prominent business man with a large salary, who had lost his wife and two children at almost the same time. Within a month after this, the man suddenly left his desk, went to the nearest bar, and drank until deeply intoxicated. He had never before been a drinker; but from that time on he repeated the performance at irregular intervals. Dr. English lost sight of him after a few years. That man's case was not one of alcohol habit, and the proper treatment of such a case is more

that of neurasthenia or insanity than that of habit. The treatment of habit is an entirely different matter. Throughout a long time, the cells have gradually got into the habit of doing a certain amount of work every day. If this work is taken away, they crave it; and the only way to get rid of that condition of affairs is to force the man to refrain from alcohol for so long a time that these cells can be regenerated or new cells that have not acquired this habit can grow in their place. Whether a man takes one or forty glasses a day makes no difference as to the kind of treatment, but does as to the length of time the treatment must be continued. Some cases can be cured in a month, and some only after three years of constant treatment; and in some the cells are so far degenerated that the patients can never be cured. This treatment can be carried out best in an institution, and he favored the establishment of such institutions by the State and large cities or counties, and the passage of laws allowing and regulating the commitment of inebriates to them as in cases of insanity.

**Dr. Rosenwasser,** closing, said that he wanted to thank the gentlemen for their discussion of his paper; as this appreciation meant more to him than to others, because he was a new member of the society. In closing he merely desired to say a few words. The people can be educated, he said; and probably this is a simple matter, as there already exists in New Jersey a law regulating the education of school children upon this subject. The Women's Christian Temperance Union had had this law put on the statute books of the State. He intended to investigate later and find out how far this law is being carried out. When a man once got rid of the craving for stimulants he ought to avoid everything that will arouse it again. Any highly spiced, irritating substance may bring on the craving for alcohol. He had spoken of voluntary commitments in his paper, and said that these would be provided for in the bill, which was to be presented to the Legislative Committee of the society before being sent to the Legislature.

Dr. Rosenwasser then proceeded to exhibit some objects of interest in connection with the subject. The first of these was a pair of shoes that the wife of a man in the county jail had tried to pass in to him. The warden had formerly been a shoemaker, and the heel did not look just right to him. On examination, he found concealed in it one hundred grains of morphin. This shows the extent to which men will go to get this drug, and to which their friends will go to help them get it. The warden of that jail knew his business. The next object was a plain mineral cocaine-blower, taken from a boy. The cocaine was placed in the glass part and blown into the nose. The next thing was a box of Scotch snuff that had been smuggled in by a woman seventy years of age, who had concealed it in her vagina. The next thing shown was fifty cents' worth of opium in the crude form. Dr. Rosenwasser also exhibited the low grade of opium pills sold by Chinamen, and a specimen of crude opium such as they smoke; also an envelope containing the residue that is left after the smoking of opium. When times are hard and they cannot get snuff, they use this substance.



## ACUTE PERFORATING GASTRIC AND DUODENAL ULCER\*

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(Concluded from the January Number.)

Case VI.—Male, 38; admitted to the Presbyterian Hospital, October, 1907. Patient is moderately alcoholic and for the past year has been drinking heavily, especially whiskey, beer and gin. Nine years ago he had a chancre with secondary symptoms and five years ago an attack of chills and fever. Two days ago he had a cramp-like pain in the lower abdomen, which came on without warning. The pain shot back and forth from right to left, but seemed more severe on the right side, and in a few minutes became more general, being specially intense in the right upper quadrant. There was nausea and vomiting one-half hour after the onset of the pain. Brandy, pepper and ginger were given to relieve the pain, without effect. An ice-bag was applied and a cathartic was given by a physician after the patient was carried home. The bowels moved for the last time thirty-six hours before admission, with some relief to the pain, which was replaced by soreness in the upper right quadrant.

Twenty-four hours before admission, tenderness became more severe and seemed to be extending to the chest and back. No further vomiting occurred and the patient retained a small quantity of milk. The chief complaints are soreness in the abdomen and weakness.

Examination.—The abdomen is symmetrical, markedly distended and generally tympanitic. There is general tenderness, especially in the upper right quadrant; the point of maximum tenderness was one inch above and to the right of the umbilicus. The rigidity corresponded in its distribution to the tenderness and is present especially over the upper part of the right costal arch. There was auscultatory dullness in the right flank. The temperature was 100.4, pulse 92, and full, the respiration was 18. The leucocytes on the day of admission were 16,600, with 83 per cent. polymorphonuclear.

\*Read by invitation before the Medical Society of New Jersey, Cape May, June 19, 1908.

Operation (forty-eight hours after perforation) immediately after admission to the hospital. A vertical incision was made above the level of the umbilicus parallel to the outer border of the right rectus. On opening the peritoneal cavity a small amount of odorless yellow fluid appeared in the wound without gas. The gall-bladder was normal. The anterior surface of the junction of the first and second parts of the duodenum was reddened and covered with fibrinous exudate. Above it and extending into the right flank were from six to eight ounces of yellow turbid fluid, evidently the contents of the duodenum. Near the centre of the fibrinous exudate, above referred to, was a small circular punched out perforation the size of a large pin head. This was found to be in the centre of an area of marked induration the size of a 25-cent piece. The perforation was closed by a purse-string suture of silk, reinforced by a Lembert suture. The region of the perforation was thoroughly cleansed with salt solution and two cigarette drains were introduced to the site of perforation and beyond. Closure.

Post-operative Condition.—There was considerable reaction for forty-eight hours with weakness and repeated vomiting of fluid. The pulse was, however, under 100 from the start. There was a small amount of sero-sanguinous discharge, the wound healing primarily. On the sixth day after operation, there was marked intestinal discharge for two days, irritating the surrounding skin. This rapidly closed and did not interfere with the movements of the bowels.

The abdominal rigidity was much relieved by operation. On his discharge from the hospital, the patient remained well for several months. At the end of that time, he developed right pleurisy with effusion for which the chest was aspirated several times. On leaving the hospital there was still a small amount of fluid in the right chest. There were no further gastric symptoms or interference with digestion.

Case VII.—Male, 42; admitted to the hospital November 5th, 1907. Referred by Dr. F. W. Chamberlin. There has always been a tendency to constipation. The appetite has usually been very good. Patient has been drinking whiskey once a day for the past five or six years. His diet consists largely of starchy material. He has had frequent attacks of indigestion for fifteen years, associated with neuralgic sub-costal pain, coming on in attacks about

twice a year, the pain being intermittent, and at times the attacks would last for as long as three weeks. With these attacks pyrosis and belching of gas have been present. The last attack occurred six weeks ago and the pain continued, although less severe, until the present attack. Fifteen minutes after taking breakfast, the patient had a sudden sharp pain beneath the costal arch, rapidly increasing in intensity and radiating to the right shoulder, accentuated by deep respiration and by flexion of the thighs. The patient is most comfortable when lying on the back. He does not try to turn over on account of the pain. There have been two attacks of vomiting, the first twenty minutes after the onset, the vomitus consisting of the stomach contents with no blood. Tenderness is present in the upper right quadrant. There is marked prostration.

**Examination.**—The abdomen is full and symmetrical in the lower half, but is not distended. There was dullness in both flanks and tympany in the centre. General rigidity was present, but was especially noticeable on the right side, and more above than below, with resistance of the right costal arch. The area of the tenderness corresponds to that of the rigidity. Peristaltic activity normal. Rectal examination negative.

**Immediate Operation.**—Chloroform anesthesia. The peritoneal cavity was opened through a vertical incision above the level of the umbilicus, and parallel to the outer border of the right rectus, with subsequently a small suprapubic incision above the symphysis. The peritoneal cavity contained considerable turbid odorless fluid, especially between the liver and the right border of the stomach. On the anterior wall of the first part of the duodenum was a small punched out perforation about four millimeters in diameter in the centre of a small patch of induration. There was a large amount of similar turbid fluid in the pelvis, although examination through the upper incision before the counter opening was made seemed to show that the exudate had not passed below the level of the transverse colon. Closure of the perforation by a silk purse-string suture reinforced by two Lembert sutures and followed by irrigation of the entire abdominal cavity and pelvis with abundant saline solution. Two cigarette drains were introduced to the point of perforation and through the suprapubic incision to the bottom of the pelvis.

**Post-operative Condition.**—Vomiting and extreme thirst appeared on the first day, which were relieved in part by saline irrigation with a small amount of whiskey. Temperature 101 degrees, pulse about 100, and general condition seemed excellent. No duodenal fistula developed. Convalescence interrupted by the formation of an ischio-rectal abscess and by the occurrence of some pain without swelling in the left leg, simulating a possible phlebitis. Exudate proved sterile in both Morris space and pelvis. In excellent health June, 1908, six months after operation.

**Case VIII.**—Male, 65; admitted to the Presbyterian Hospital, March, 1908. Patient has always lived under good hygienic conditions and has never indulged to excess in tobacco or alcohol, or other stimulants. There was a history of colitis thirty-five years ago, since when patient has been in excellent health. For a year past he has been suffering from indefinite pains and cramps in the abdomen with eructations of gas, the pain referred in general to the front of the abdomen and chest. About ten days before admission, there was an acute exacerbation of pain and eructations of gas were frequent. These pains were not localized but seemed to involve the stomach and lower chest. They did not appear to interfere materially with digestion nor with the movements of the bowels. Two days before admission the patient had a sudden agonizing pain general throughout the abdomen and shifting from one place to another on change of position. This pain was so severe that it caused him to double up and he had to be assisted home. On the day before admission, the pain became less severe but more persistent and became more localized in the upper right hypochondrium. At the same time, without premonition, projectile vomiting took place, the vomitus consisting of a large quantity of dark, foul fluid material. The vomiting continued at intervals until admission. The prostration was so extreme that the patient lost both flesh and strength rapidly and appeared to shrink away. The bowels had not moved for three days prior to admission.

**Examination.**—The abdomen is slightly distended on the right side, but not on the left. The right side is rigid and does not move with respiration. Rigidity and tenderness were most marked in the upper right quadrant with dullness in the right flank, extending up to the right hypochondrium. There is distinct rigidity of the



right costal arch. The tongue is coated. The patient has a very considerable degree of general arterial sclerosis. Leucocytosis 15,600, polymorphonuclear 90 per cent.

Operation.—Gas and ether anesthesia. The peritoneal cavity was opened through a vertical incision above the level of the umbilicus parallel to the outer margin of the right rectus muscle, and subsequently a mid-suprapubic incision one and one-half inches in length was also made. On opening the peritoneal cavity about one pint of thin, dirty yellow, turbid, odorless fluid poured out of the wound. There was a small perforation, the size of a large pea, on the anterior surface of the first part of the duodenum from which fluid similar to that present in the peritoneal cavity exuded. This was closed with a purse-string silk suture reinforced by a Lembert suture. The general peritoneal cavity was cleansed by irrigation with a large amount of salt solution and cigarette drains were introduced into the pelvis and to the site of perforation. The small intestine was moderately distended and in places covered by a fibrinous exudate; closure; operation lasted forty minutes.

Post-operative Condition. — Convalescence was very slow and associated for several weeks after the operation with a persistent diarrhea that was controlled only with considerable difficulty. The patient was greatly emaciated but took his nourishment at all times without difficulty. His pulse varied between 80 and 100, and was of fair volume. The temperature varied between 101 degrees and 102 degrees. The discharge was free but never contained intestinal contents. The suprapubic wound closed with much less discharge and much more promptly than the pararectal incision which, about three weeks after the operation, required a counter-opening for purposes of drainage. For the first six weeks after the operation patient had a troublesome cough with a purulent expectoration, but never showed any sign of consolidation. At one time about two ounces of clear serous fluid was withdrawn from the right pleural cavity just above the diaphragm. Three months after the operation, the patient is convalescent and gaining in strength every day.

Smear from the general peritoneal cavity showed streptococci and also Gram positive and negative bacilli.

Smear from exudate in the pelvis shows

pus but no bacteria, while the culture from the exudate is sterile.

Urine at time of admission showed repeatedly a faint trace of albumen with an average normal specific gravity. There were no casts.

Case IX.—T. G., male, 50; admitted to the Presbyterian Hospital, October, 1903. On account of a condition of acute alcoholism, a satisfactory history prior to the patient's admission, could not be obtained. He was said to have been seized twenty-four hours before admission with severe cramp-like pain in the right hypochondrium, which has continued since. The patient complains of tenderness over the region of the gall-bladder and says that he is most comfortable in the dorsal position and that to turn over to the left is more painful than to turn over to the right side. Shortly after admission to the hospital, patient had several attacks of vomiting, the vomitus containing large amounts of whiskey.

On examination, the entire abdomen was held rigid, the rigidity being most pronounced in the right hypochondrium and the adjacent part of the right costal arch. Just below in the region of the gall-bladder there was marked tenderness. The rigidity did not disappear when the patient fell asleep. The pulse was regular, varying between 70 and 80; and of good force. There was a general leucocytosis of 15,000. The patient was admitted to the medical side of the hospital, a diagnosis of alcoholic cholecystitis having been made by the examining physician.

On the following day the patient's condition was unchanged, save that both pulse and temperature were somewhat higher. There was also constipation, a slight amount of flatus only passing the bowel. He was then transferred to the surgical division and prepared for immediate operation.

Gas and Ether Anesthesia.—Incision over the outer upper border of the right rectus. The peritoneal cavity contained a considerable amount of yellow serous fluid, the coils of small intestine being glued together with bands of fibrine. On separation of these adhesions a cavity was entered containing pus which increased in turbidity as the duodenum was approached. On the anterior wall of the second portion of the duodenum an orifice, the size of a lead pencil, and having a very hard edge, was exposed with a loop of

small intestine adherent below. The orifice was closed by a purse-string suture of silk reinforced by Lembert sutures, and after local cleansing with salt solution of the abscess cavity, the abdominal wound was closed, a cigarette drain being inserted to the point of suture.

The patient rested well after the operation, there being considerable nausea for the first twenty-four hours. On the day following the operation, the pulse varied between 100 and 120. The patient was distinctly apathetic at times, evidently the result, in part at least, of the alcoholism. During the second twenty-four hours, the condition was unchanged. The vomiting had ceased and the patient had several large brown fecal movements after the insertion of a colocynth suppository. During the third and fourth days, restlessness with gradually increasing abdominal distension appeared, the patient dying at the end of the fourth day. No autopsy was allowed.

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## DISCUSSION.

**Dr. Gordon K. Dickinson, Jersey City,** said that the paper of Dr. Eliot which he had the privilege of reading over in part, was one that ought to have been read in detail, being full of practical points and guide-posts and an important thesis regarding the evolution of the present attitude toward gastro-intestinal conditions. The medical profession as a body, said Dr. Dickinson, is intensely ignorant of the pathological diagnostic points in gastric and duodenal conditions, as is evidenced by the letters received by Dr. Eliot. The men that do surgical work in this direction are dependent upon the average practitioner for preliminary diagnoses, and it is surprising how many of the latter to-day will make a diagnosis of dyspepsia and let the case run on indefinitely. Therefore, the cases come to the surgeon in an unsatisfactory condition for the work to be done. For gastro-duodenal ulcerations there are two causes. One is the constitutional state connected with the anemias, and the other is a condition entirely local. In the female we find an acute ulcer tending to perforate. In the male it is more commonly a chronic ulcer. Its tendency is rather to produce protective adhesions. In the duodenum the causes are different: ulceration being due largely to the pouring into it of noxious fluids. The liver is an organ to burn toxic substances in the blood. If, instead, they are thrown in the bowel there may be formed ulcers in that region. Sometimes after gastro-enterostomies peptic ulceration is induced. The treatment of gastro-duodenal ulcers is first preventive. As largely as possible, the profession should consider that every anemic man, woman, and every person with a chronic, continuous or relapsing condition, should be so treated that the possibility of the formation of ulcer may be minimized. If the symptoms continue for any length of time, the surgeon should be consulted. Statistics are always fallacious, especially in a topic of this kind. Dr. Dickinson said that he admired the surgeon who will stand, with statistics based upon well-studied cases, against the internist who claims that the death-rate by internal treatment is lower than by operative.

**Dr. James S. Brown, Montclair,** said that he also had had the pleasure of looking over the paper, and stated that those that had been recently giving some attention to the surgery of the stomach would admit that there is no finer paper in the English language regarding the statistics of this condition than that of Dr. Eliot. The symptoms of gastric ulcer and perforation of duodenal ulcer are acute only in the typical cases, but, unfortunately, as Dr. Eliot had pointed out, there are a great many cases with symptoms of spreading peritonitis in which one is undecided whether the symptoms are due to perforation at the duodenum or pylorus or at the appendix or gall-bladder. Of fifty-one cases collected by Moynihan, the true condition was diagnosed in only two cases. Dr. Brown thought, however, that even the cases that one is not sure they are due to a ruptured duodenal

ulcer have about them something that makes one doubt that the condition is due to a rupture of either the appendix or the gall-bladder. Besides, it is not of so much consequence that a diagnosis should be made before the peritoneum is entered as that an incision that will cover the field in any case should be made. As pointed out by Dr. Eliot, there is no difficulty in making a diagnosis as soon as the abdomen is opened; for the fluid found is at once characteristic. Dr. Brown's experience had covered only six personal cases of rupture, in which there was somewhat over seventy per cent. of mortality, all having been seen too late. The last case operated on by him, only four or five days before the meeting, had been allowed to run on for six days after the rupture without a doctor being consulted. The symptoms were typical, but the pain was not excruciating. Pain of the abdomen, said Dr. Brown, is relative, as in other parts of the body. One patient will suffer severely, and another not so much. In this last case, however, the patient was treated by means of Christian Science for six days. In these cases, when the abdomen is distended with gas and there is a lack of liver fatness, a little difficulty will arise in the diagnosis. Another thing noticed by Dr. Brown in connection with the histories of reported cases and of his own was that the dry cases are more rapidly fatal than the very wet ones; that is, the cases in which the abdomen is opened late, only a small amount of fluid being found with immense distension, are rapidly fatal. The reason, he said, is probably that there is a lack of the staphylococcus albus, which stimulates the peritoneum, and especially the omentum, into a rapid phagocytosis.

**Dr. Thomas W. Harvey, Orange**, said it was very interesting that for the second time during this meeting of the society the operation of gastroenterostomy, which at one time had threatened to connect almost every one's stomach with his intestines, had received a check. While he considered that there are legitimate and proper indications for this operation, he doubted very much whether it should be used for drainage or for bleeding ulcers.

**Dr. Frank D. Gray, Jersey City**, said that the literature on this subject is very meager and the number of cases reported had been small. For this reason even one case might be of interest. He had been unfortunate enough to make the failure in diagnosis which Dr. Eliot had mentioned in his paper as having occurred, that of taking a case of perforating gastric ulcer on the anterior wall for one of appendicitis.

**Dr. W. J. Chandler, South Orange**, said that he knew of no one more competent to discuss the question than the president, and trusted that he would favor the society with his views.

**Dr. Edward J. Ill, Newark**, said that he was sorry that his experience had been limited to one case. He had been opening the abdomen for all sorts of things since 1878, when he had first excised a portion of the large intestine for obstruction. He had found but one case of ulcer of the stomach, so that he did not consider that his experience in the treatment of such cases amounted to anything.

**Dr. Eliot**, closing, said that he had already

taken up so much of the society's valuable time that he would forego further discussion of the subject and only express his appreciation of the courtesy and kindness shown him and thank the members of the society for the privilege of bringing the subject before them and for their very generous discussion of it.

## THE DIFFERENTIAL DIAGNOSIS OF TUMORS OF THE BREAST.\*

By Edward J. Ill, M. D.,  
Newark, N. J.

Tumors of the breast of one kind or another are so frequent and errors in their diagnosis so common and fatal, that one cannot spend too much time in their study. He who wishes to know all about his cases must not only study the case from a clinical aspect, but also from a pathological one. For it is only by a study of their pathology that a clear understanding of the clinically objective symptoms becomes apparent.

It is not my aim to give you a full and exhaustive treatise on tumors of the breast. That subject would fill a book. In fact it always seemed to me that all books on the subject within my reach were entirely too concise and deficient, for I could rarely find what I was particularly interested in. The question of tumors of the breast and their classification seems still in an unsettled condition, not to speak at all of their treatment. The treatment without mutilation is about nil. It is this that offers so large a field for future investigation. We have all been tripped up on our diagnoses of diseases of the breast. This is not to be wondered at, for many a time even a microscopic diagnosis was difficult in my experience.

In an examination of the breast for tumors, one should never fail to let the patient lie down as one of the positions. A very small tumor will not only be more easily felt in this position than in any other, but its character is more clearly defined.

What I wish to draw your attention especially to this evening is the differentiation of the more common forms.

In our mind's eye we must consider five forms of tumors:

\*Read before the Morristown Medical Society and the Newark Medical League, April, 1908.



1st.—The Simple Inflammatory Tumor, or the ACUTE MASTITIS;

2nd.—The Chronic Inflammatory Conditions, and their sequelæ;

3rd.—The SIMPLE HYPERTROPHY;

4th.—The BENIGN NEW GROWTH;

5th.—The MALIGNANT NEW GROWTH;

The simple suppurative and non-suppurative tumors commonly occur in the nursing mother. That condition is a great aid in the diagnosis. It usually begins with a chill and some fever. Commonly an abrasion at the nipple is the origin of the infection. Often such an abrasion will cause a LYMPHANGITIS, as shown by a red streak running over the breast towards the axilla. At other times a small abscess near the nipple ends the process, as you have all seen. Now and then a deep abscess occurs. We must remember however that suppurative MASTITIS occurs at other times of life. I need only mention the new born baby with an irritated breast. I have usually seen it in women, however, who have had sensitive nipples. I have seen it in a girl of eighteen and in a woman of sixty years. No age seems exempt. The attack in the non-nursing mother is rarely stormy, but rather insidious. In some of the cases there was an attack of pain and fever noted. In the case of the old lady spoken of before there was a chill while she was taking a long ride on an autumn day.

In the non-puerperal abscesses the pus is slow forming, sometimes the abscess has lasted for months. This results in an abscess with a very hard induration around it. Such a case is easily mistaken for CANCEROUS disease. Though there is rarely a retraction of the nipple, there is often an enlargement of the axillary glands. In this chronic abscess there is no fever. Twice I have seen the breast removed for this disease under misapprehension. Once I did it myself and at another time I permitted it to be done by a friend. In each case the tumor was so hard and fixed that even after its removal no fluctuation was apparent. The abscess was the smallest part of the tumor. No tubercular tissue was found. The tumors had existed for over a year. Axillary glandular infection was apparent in one case.

It will probably be very difficult to differentiate this form of tumor from CARCINOMA except by the use of the aspirating needle. I believe, however, that this procedure is a dangerous one. If the tumor is CARCINOMATOUS we are not apt to infect

tissue outside of the area with cancer cells, and thus may a simple operation become fatal. We had better, therefore, do a radical operation under misapprehension.

The CHRONIC INFLAMMATORY CONDITION is of greater importance than the acute suppurative mastitis because of its sequelæ, or rather its ending. It is well worthy of a careful study. The disease may be local or diffuse.

The pathological anatomy tells of the proliferation of the fibrous tissue in and around the ducts and acini leading to atrophic changes by pressure. The formation of nodules in the periphery of the breast is common, and is produced by the growth of the fibrous tissue, and the construction of the bundles of gland tissue. By the occlusion or constriction of the lumina of the ducts it often leads to that formation of cysts called RETENTION CYSTS. Most of these cysts are formed by the constriction of the periductal fibrous tissue. The true pathology, however, is still doubtful. These cysts may be very small, almost the size of a small pin head, or may reach the size of a man's thumb. The *causation* should be carefully considered, though it is doubtful in many cases. Acute suppurative and non-suppurative inflammation is surely the cause in many cases. Many times I thought that lactation did the mischief. Then again I got an impression that women with frequent abortions and miscarriages suffered most; thus starting an imperfect involution of the breast. Then again, I saw it quite often in women who never had had children, and in women who had never married.

An important consideration is the relationship of the breast to the reproductive organs. Many women have a rather severe turgescence of the breast during the first and second days of the menstrual epoch, causing much discomfort, pain and swelling. It is in these women that I have seen the disease most frequently. Whether it is the cause or the effect I am unable to say. I am also not aware that any one disease of the generative organs is more a cause than any other. A few times I have seen the disease in young girls soon after puberty where no cause could be assigned.

The breasts in women are prominent organs, and subject to much physical insult. Fashion directs that they should be lifted up high and that they should be compressed by stiff and unyielding corsets.

The CLINICAL DIAGNOSIS should present no obstacle though often enough it is mis-

taken for malignancy. Women thus afflicted complain of tenderness of the breasts either local or general. In women in the active sexual period of life this tenderness is usually increased by the onset of menstruation. Frequently women present themselves because they have found small tumors.

On physical examination we find the peripheral part of the breast presents small hard nodules freely movable under the skin, and in their fatty bed. With the centre of the breast fixed, these small bodies can be moved in a limited circle, and toward the fixed centre, but not outward beyond a certain circle. The single tumors which are rare, are said to be most frequently found in the inner and lower quadrant of the breast. I have never made any such observations or records.

In the diffuse form which is the common form, the smaller tumors are apt to be in the periphery, while the larger ones are in the centre. They vary very much in size, and can often be felt in the same breast from the size of a pea to the size of a walnut. The breast often feels like a cake under the skin. Besides the sore breasts the pain radiates along the shoulders and arms. As already said from the construction of the ducts, we are apt to have retention cysts, and these may be discovered by their peculiar elasticity even when very small, especially when the patient is on her back.

The single large cysts contain a thin fluid from a yellowish gray to a slate color. This condition should not be confounded with malignant disease. It differs from carcinoma, because of the entire absence of induration, and fixation in the fat tissue, the cardinal symptom of malignancy. It never produces retraction of the nipple, nor any enlargement of the lymphatic glands. While the latter two physical conditions do not always accompany the early stage of carcinoma, the former is an unfailling differential symptom.

The CHRONIC MASTITIS might be confounded with the NON-MALIGNANT tumors. From the CYST ADENOMA it should be differentiated by the history of the gradual development and the freedom from all pain of cyst adenoma. The cyst adenoma might develop in a retention cyst, and thus we have a true combination of two diseases. In such fluid we invariably find blood corpuscles, leucocytes and black pigmented granules. The fluid is always of a pinkish yellow character. Finney tells us that

the adeno-cystoma presents malignant elements in one-half of all cases, and, therefore, is sometimes called DUCT CARCINOMA. Nor shall this condition be confounded with the PAPILLARY CYST ADENOMA, or the DUCT ADENOMA, for here the invariable watery pinkish yellow discharge from the nipple is characteristic. But of this more later on.

The DIFFUSE SIMPLE HYPERTROPHY can never be mistaken for a CHRONIC MASTITIS. The former is a growth of the gland tissue, and reaches an immense size. The latter rather represents that condition which finds its parallel in the cirrhosis of other organs. I have often, therefore, called the latter disease CIRRHOSIS of the breast. I have seen the breasts hang well below the navel, and the woman exhausted by the weight of them. They have a uniform feel of great massiveness such as we get in the virgin or normal breast.

Besides the diffuse simple hypertrophy is a rare disease and a deformity one of no mean proportion.

#### THE BENIGN NEW GROWTHS.

To go into the differentiation of the benign new growths would mean to take up the whole pathological anatomy of the breast, and is entirely out of our sphere. This is simply meant for a clinical paper. It is, however, necessary for a full understanding to know that tumors originate either in the periductal stroma or in the epithelial tissue. At times there is an abundant proliferation of both kinds. Our nomenclature recognizes this, and we speak of the simple adenoma, when the granular elements are the only factor. We speak also of fibromata of various kinds, and of the fibro-adenomata when the adenomatous tissue predominates over the fibrous, and in the adeno-fibromata the reverse hold good. By the fibro-cyst-adenomata we mean a cyst where both elements are implicated. And lastly when there is an ingrowth of connective tissue into the duct covered with gland tissue we have the papillary cyst adenoma or duct adenoma, according to whether the cyst is an occluded one or is in an open duct that discharges from the nipple.

These growths are all important as they occur daily in our practice and should have our careful consideration. The more rare growths, however, like the LIPOMA, ENCHONDROMA, MYXOMA, etc., need not detain us.

Little can be said as to the cause of



these fibrous and adenomatous tumors. They grow rather superficially in the breast as firm, hard, round or ovoid masses. They are usually single and rarely multiple. When single they are difficult to differentiate from the single inflamed chronic mastitic nodule. They are distinctly encapsulated and attached to the rest of the breast by a duct prolongation. They are freely movable and usually found in one breast only, though I have seen them in both breasts. Their growth is very slow. I have never seen them as large as described in the books. The surgery of to-day does not permit it. The largest that I ever saw was of the size of a pigeon's egg. As patients nowadays come to us as soon as they feel a tumor, the common size is that from a bean to that of a small cherry.

**Symptoms** — The symptoms of the FIBRO-ADENOMATOUS growths are commonly objective only. Now and then a sensitive tumor is found. The tumors are superficial and freely movable under the skin. They are most commonly situated at the outer and upper quadrant of the breast, but no part of the breast is immune. I have seen them sensitive at the time of menstruation, and with increased tension. This symptom must be taken with some reserve, however, as most frequently the whole breast is sensitive. It is said that they sometimes grow rapidly at the time of conception. This would only be another proof of the close and intimate relation of the breast with the organs of generation and their function.

There is never any retraction of the nipple nor lymphatic involvement. In the larger tumors a distinct lobulation will be noticed, due to a contraction of the fibrous tissue or possibly due to a slower growth of the fibrous tissue than the glandular tissue. They never become adherent to the skin nor produce any infiltration of the tissue around them. Such infiltration always indicates malignant disease. Some of these tumors are said to be the cause of mastodynia, which so commonly is of obscure origin and usually belongs to the neurasthenic. Mastodynia has been known to be cured by the removal of even a very small tumor, however.

**Cystic Tumors.**—When we find tumors with an elastic feel our suspicions of CYSTIC DEGENERATION should always be aroused. They commonly occur with adeno-fibromatous changes and are likely the result of such disease, not the cause.

When there is a yellowish pink discharge of a thin watery consistency from the nipple a PAPILLARY CYST ADENOMA of the duct is a safe diagnosis.

These tumors in their early stages start near the nipple, but as they grow older invade the whole breast. I had occasion to observe such a growth for eleven years before the patient permitted its removal. She was a colored woman, and was forced to the operation because the discharge was sufficiently large to go through all her clothing several times a day. The specimen I show here also came from a colored woman, and is of six years' duration. Because they have their origin in the milk ducts, the term duct papilloma is well chosen. They are differentiated from the fibro-adenoma because of their origin near the nipple, appear as an elongated mass and never slip about under the finger as do the latter, and because of the discharge already spoken of. These tumors sometimes heal spontaneously as I had occasion to observe in two cases.

To differentiate the FIBRO CYST ADENOMA from the FIBRO-ADENOMA is most difficult, especially in the early stage of the former, before the cystic element predominates, since both occur in the periphery of the breast and one is the ultimate result of the other. The fibro-cyst-adenoma never presents any discharge from the nipple. While there has been an opinion expressed that they present elements of malignancy, I have never found such to be the case, nor have I seen recurrence after removal.

Of the papillary cyst adenoma of the duct I have seen ten cases, one of which I observed for twenty years when the patient died of chronic Bright's disease. Greenough and Simmons have seen three out of their twenty cases reported that were malignant. The disease in these cases lasted nine, twelve and eighteen months, respectively. Two remained cured after extirpation, while the third died in four years—from recurrence.

The question must remain an open one for me whether these were not distinctly adeno carcinomatous from the beginning. The old term duct carcinoma would fit these cases very well. In Tillman's surgery these tumors are called cysto-sarcoma phyllodes. There is absolutely nothing sarcomatous about them. Years ago when these cases of duct papilloma were first studied by me one of them traveled to two prominent New York surgeons. When I found she had been to see them I

looked these gentlemen up, but neither one could give me any information as to their pathology. It was not until a patient of Dr. Pierson, of Roselle, permitted the removal of the breast that I had a clear conception of this disease.

They are differentiated from cancer by their slow growth, elastic feel, and the discharge from the nipple whose microscopic appearance is always the same. The tumor never becomes adherent to the skin, and there is never any lymphatic involvement.

The simple adenoma is so rare that it need not concern us. I have never even seen one.

The surety of having a benign growth to deal with is of the utmost comfort to our peace of mind. This is quite different when the diagnosis is doubtful, and this it often is, especially when a benign growth occurs near an old scar.

**Carcinomata.**— There can be no question concerning the frequency and malignancy of carcinomata in its various forms. This cannot be said of the sarcomata. The sarcoma in some forms show hardly any tendency to malignancy, and their differentiation by the pathologist is very difficult. Sarcomata of the breast have been divided into two forms. The ADENO-SARCOMA, or, as Warren calls them, the periductal sarcoma, and the TRUE SARCOMA as we find it elsewhere. The former is said to be much less malignant than the latter. I have serious doubt of its being malignant at all, but only an exaggerated form of fibroma in which the cellular tissue is over-abundant. These tumors take in the whole breast, are of slow growth, and attain a large size. Ulceration of the skin with mushroom growth occurs, but no glandular involvement. They are encapsulated in the early stage and never show metastases. I was in hope of showing you this peculiar growth, but unfortunately the specimen was lost.

The TRUE SARCOMATA is of much graver import. They are very malignant, grow rapidly and show metastases early. They have, however, no relation to the mammary gland tissue except that they originate in the stroma and do not differ from sarcoma elsewhere in the cellular tissue. They usually occur in married women, though the unmarried are not entirely free from the disease. They are most common at the age of from 45 to 55 years. They are rarely cystic. In their early stages they are encapsulated, which is an import-

ant thing to remember in the clinical diagnosis, but later break through into the surrounding tissue. But 3 per cent. or 4 per cent. of all malignant tumors of the breasts are sarcomata.

**Diagnosis.**— The diagnosis is difficult in the early stages, but should be readily made later, because of the peculiar elastic, and oftentimes semi-fluctuating, feel of the tumor. The small round-celled sarcoma presents this semi-fluctuating feel more than the spindle-shaped form. The difficulty of differentiating it from the ordinary fibro-adenoma in the early stage is insurmountable. Only lately I have removed a small mass from the breast which I took for a fibro-adenoma, and which proved to be a sarcoma when examined by the microscope. Every tumor removed from the breast should be examined by a competent pathologist.

The sarcoma is easily distinguished from the carcinoma in the early stage by its encapsulation, its rapid growth and its freedom from adhesion to the skin or chest wall. Involvement of the axillary and subclavian glands are rare, but are constant in carcinoma.

Next to a chronic mastitis and its sequelae, which are of every day occurrence, carcinoma is the most frequent neoplasm of the breast. We cannot be too much impressed with this fact. They most frequently occur at the ages of from 45 to 65 years. Sixty years is the age of 21.5 per cent. of all cases as shown by the statistics of Rodman. It must not be forgotten that carcinoma may occur at an early age, however. I saw it in a patient of 28 years. It proved fatal in a few months. Carcinoma in the young is much more fatal than in the aged, probably because of the increased development of the lymphatic tissues. It is most common in the married and in those who have borne and nursed children. I have seen it a number of times in single women. One interesting case of an unmarried woman of 35 years I saw within a year, which developed to such a size, and was of such softness that I mistook it for a sarcoma. The specimen showed that it was an adeno-carcinoma. She died from general carcinomatosis in a few months from the beginning of her illness. This form is often known as ACUTE CANCER, and has been known to lead to a fatal end in six weeks.

Much time has been wasted as to its exciting cause. Usually it is ascribed to a



trauma. When one considers how often women receive blows on the breast without developing malignancy, this theory immediately becomes fallible. It seems to be one of those things that have been handed down from our medical ancestors and which we have repeated because we know nothing better. It is reported that on an average both breasts are implicated in about 2 per cent. of all cases. Cancer affecting two distinct organs simultaneously and not connected by lymphatics, is extremely rare, and should be borne in mind when we are called upon to diagnose a case. It is so rare that many doubt the observation as correct. Most likely the second tumor was metastatic. Recurrences in the other breast after extirpation is not uncommon. Lymphatics that have been known to cross the sternum, will account for some cases. Further observation will be necessary to settle this important question.

As a rule the symptoms of mammary cancer are slow to develop both in the objective and subjective sense. Most commonly women tell me that they have discovered the tumor by accident. The fact that many women and some doctors, too, wait until pain manifests itself before a diagnosis is made, is a most fatal error. Pain is a late symptom. I well remember how Dr. Willard Parker insisted on the patient having a lancinating pain as a diagnostic symptom.

My experience has been to see the soft nodular, or the adeno-carcinoma in the young and the scirrhus or fibro-carcinoma in the older women.

The location is most frequent in the upper and outer quadrant of the breast, but no part is immune. It begins as a hard small nodule which is fixed in the mammary tissue, and adherent to the surrounding structures. It soon becomes adherent to the skin, and retracts the nipple in a large proportion of cases. The latter symptom is, however, not necessary for the diagnosis. Gross observed this symptom in only a little more than half of his cases. When the skin becomes adherent it presents a hard, edematous, and corrugated appearance, later adhesions to the pectoral muscles take place. Cachexia is a late symptom. The man who waits to base his diagnosis on this symptom gives his patient no chance by operation. For when this symptom has occurred operation is almost out of the question. The older books invariably make this a symp-

tom and invariably I hear doctors say "but she is not cachectic."

Very commonly women come to the physician apparently in perfect health showing such a tumor. I have seen women look the picture of health with even an ulcerated carcinoma. Sometimes it is astonishing how they will hide from their family the presence of a tumor. Its differentiation from adeno-fibroma should not be difficult in the early stage because of its adhesion to the surrounding tissue. The adeno-fibroma is most common in the young woman and for the most part situated in the outer aspect of the breast.

Its differentiation from chronic mastitis is mainly from the fact that this disease is disseminated through the breast and little hobnail-like excrescences are found everywhere. Very rarely are they localized as cancer is. When the chronic mastitis has progressed to a cystic degeneration of small size there might be some difficulty in the diagnosis, but not if we remember how fixed the carcinoma is in the surrounding tissue. The almost constant pain in the chronic mastitis is a symptom which in early carcinoma is entirely absent.

In the very fat women it might be difficult to distinguish between a fixed and a movable tumor. Only lately I have had a woman come to my office on several occasions before I could feel any tumor at all, which she insisted was there. When I did feel it, however, there was no question as to its nature. One can rarely rely on the swollen axillary glands in the early stages, since it is difficult to feel them. Later they became apparent, but by that time there ought to be no difficulty in the diagnosis as to the character of the original tumor.

I speak of the CARCINOMA ENCUIRASSE simply as a form of late carcinoma which cannot be mistaken for any other form of disease.

It remains for me to speak of the ATROPHIC SCIRRHUS CARCINOMA of the aged. The mass seems to have a tendency to contract to cartilaginous hardness. The affected breast is always smaller than its fellow. The nipple is always retracted and often has disappeared entirely. The disease may last for years before the final, but inevitable, end. It has been known to continue for ten or fifteen years. It has often been said that these patients live longer without than with an operation. This I am not yet ready to accept as a dogma.

## ACUTE CHOREA.\*

By **Charles H. Scribner, M. D.**

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My apology for presenting this subject to you to-night is that there has recently been a great deal of investigation and discussion of the etiology and treatment of this disease. As you know, Chorea Minor, or Acute Chorea, sometimes called Sydenham's Chorea, or St. Vitus' Dance, is a nervous disease characterized by irregular, purposeless movements, sometimes limited to certain muscles, but at other times involving all the muscles of the face, trunk and limbs. It is not until we seek for the cause of the disease that we meet with a wide divergence of opinion. A good many years ago, it was considered by nearly every one to be a state of demoniacal possession, and to cure it, it was necessary to cast out the devil.

Niemeyer, as late as 1875, classed chorea as one of the general neuroses of unknown origin. Even at the present day authors do not agree as to the etiology, although the recent study of the pathology of the disease is beginning to bear fruit in a better understanding of the causes which produce it. It is now acknowledged by all authorities that the lesions which cause the purposeless movements are in the cerebral hemispheres, and that those movements are caused by an irritation of some part of the cerebral cortex or basal ganglia. This much is established by the fact that chorea never occurs in an infant, nor until the great motor tracts are fully developed from the brain to the periphery. These tracts are not fully formed until a child is over a year old. In the animals having a developed motor tract, chorea exists; in those lower animals in which it is not fully developed, we do not find the disease. Thus we find an explanation of the age at which the disease develops. Dr. Prout, in an able paper on this subject which he read before the Medical Society of the State of New Jersey, states that among the last four hundred cases at the Vanderbilt Clinic, the youngest was three and a quarter years old and there were but nine cases altogether under five years of age.

\*Read at the meeting of the Passaic County Medical Society, December 8, 1908.

Besides the motor manifestations, there are various mental symptoms which all point to the fact that the irritation or lesion is in the cerebral cortex or basal ganglia. These symptoms are irritability, capriciousness, changed character, impaired memory, night terrors, sleeplessness and sometimes hallucinations and impairment of the special senses, markedly those of taste and smell.

The pathological findings clearly corroborate the physiological evidence as to the seat of the disease. In autopsies in cases of chorea, congestion and oedema of the pia mater and cortex are found, and there is a marked perivascular infiltration. The seriousness of this condition arises from the fact that the blood vessels of the brain are terminal and that, therefore, the inflammatory products have to be removed through the lymph system. Of the other lesions of the disease, the heart affection is most commonly found and is the most important. Some authors state that the heart murmurs are only those of anaemia—in so far as they are related to the disease—but the autopsies in recent cases seem to prove the presence of real organic trouble. Vegetative products have been found upon the endocardium and these products produce thickening of the valves. The pulse rate is also markedly increased.

Bearing in mind the physiology of the brain and nervous system and the pathology of the disease, it becomes somewhat easier to discuss the causes which produce chorea. As has been intimated, its onset has been ascribed to many and various causes. Heredity used to be given as a cause and it is undoubtedly a predisposing cause. Nervous disorders are common in the parents of children who have chorea. Insanity in the family particularly predisposes to choreic children, and the cases of chorea occurring in such families are usually of grave character.

For many years the occurrence of chorea in rheumatic subjects has been noted. This was first emphasized by Roger in 1866 and at the present time there is a fair amount of agreement that chorea, heart lesions, and rheumatism are either related diseases or have a common origin. In fact, it is coming to be more and more believed that chorea is an infectious disease with a specific bacillus. As yet this has not been proved, but the facts already known all point in that direction, and it is at least probable enough to war-



rant us in using prophylactic measures in the treatment of the disease. When this specific micro-organism is isolated our whole treatment of the disease may be modified and improved.

Dr. W. K. Newton, in his recent address before the State Medical Society, drew our attention to the fact that the joint affections which so commonly follow the infective diseases, particularly scarlatina and tonsillitis, are probably due to the invasion of the pathogenic material or bacilli through the throat and tonsils—the joint affection not being of true rheumatic character but an arthritis of infective type. On account of the close relationship of these diseases with chorea, may it not be possible that chorea is produced in the same manner and quite likely by the same micro-organism? When the infective material, instead of attacking the joints, finds a lodgment in the brain, thereby setting up an irritation, chorea would result. The fact that an attack of chorea predisposes the patient to another attack could be explained by the bacilli becoming latent in the tissues of the body and awaiting a favorable opportunity for the redevelopment of the disease. It seems to me, therefore, that the theory that chorea is an infective disease is, at least, highly probable. If this is true it becomes vitally important for us to bear it in mind and use prophylactic measures in the treatment not merely of chorea but of all the allied diseases. By careful attention to, and disinfection of the throat in scarlatina and follicular tonsillitis many cases of chorea as well as arthritis could be prevented. If this theory is true, further investigation ought to prove that chorea is not related to acute articular rheumatism but to those rheumatoid affections which are secondary to the infective diseases.

#### TREATMENT.

In the treatment of this disease, even in the mild cases, we should isolate the child as much as possible from other children. It has long been recognized that this is important. Many cases of hysterical chorea and some cases of true chorea seem to have arisen from not exercising this precaution. Even if, as Forchheimer states, these cases are all hysterical, the prevention of such a condition is desirable. The child should be taken from school and should be kept in bed for a length of time dependent upon the severity of the disease. Fresh air and sunlight with cheer-

ful surroundings are important. The food should be light and such as can be easily digested. It should also be nutritious and non-constipating. After the acute stage of the disease is past the child should be kept in the open air as much as possible and yet still kept separate from other children.

The fact that so many drugs have been recommended and used in this disease, tends to show that, ordinarily, this disease is self-limited in its character and that most of the patients would recover without recourse to medicinal treatment. This is probably true of all of the mild and hysterical forms of chorea. However, all of the authorities I have consulted agree that arsenic is the remedy for chorea, and that Fowler's solution is the best preparation of that drug. Beginning with two or three minims in water after meals, and increasing one minim each day, it should be given until the physiological effects of arsenic are obtained. As soon as the lids become puffy or gastro-intestinal symptoms develop the dose should be decreased again to the starting point. In my own cases I have used the bromide of gold and arsenic with some success and without poisonous symptoms.

Dr. Prout states that usually the large doses are unnecessary and that most cases will get well upon a dosage of two or three minims after each meal regularly for three or four weeks. He does not state, however, what would be more valuable to know, whether these same cases would get well under his careful hygienic treatment, in three or four weeks, with absolutely no medicines given. I believe that they would. Arsenic is not an infallible remedy and it may be necessary to use other drugs. Antipyrine is one of the most valuable. Children bear it well and it lessens muscular activity, and eases the pains of limbs and joints when present. The salicylates, salol, etc.—the remedies used in rheumatism—are also used with more or less success.

In the grave form of the disease, however, none of these remedies seem to exert much influence. In this form of chorea, we are confronted with very serious symptoms. The muscular movements are violent, inco-ordinate and constant, the patient is in danger of traumatism and exhaustion. The bed has to be padded and the patient restrained. Proper feeding is impossible.

Bouchut was the first to formulate a

method by which these patients may be cured, and it is based on the fact that these violent movements frequently will cease if the patient can be kept profoundly asleep for two or three days. The drug used is chloral hydrate, which was first recommended for this disease by Gairdner. Bouchut first called attention to the fact that children can take large doses of chloral with impunity. The treatment is described by Forchheimer as follows: "In order to carry out this method, the child (I have never tried this method in the adult) should either be taken to a hospital, or, if kept at home, be placed under such conditions that he can be watched night and day. The feeding now should consist only of fluid food—milk, broth, eggs—which must be given at regular intervals in sufficient quantity, the child being given water when necessary. All precautions should be taken as recommended for the mild form. Chloral is given in five-grain doses every four hours the first day; the second day, two and a half grains are added to each dose; the next day the same quantity until the proper effect is produced. This proper effect consists in keeping the patient asleep until the choreic movements have ceased for about twelve hours. When any digestive disturbances or heart symptoms are produced, the treatment must be interrupted. It is impossible to state how long a time it will require to carry out this treatment, and how much chloral must be given, as both requirements differ in individuals; one of my patients, aged nine years, took eighty grains in the course of a day. In my experience, this treatment has always resulted in one of two ways, either the child wakes up cured—i. e., without any form of chorea—or the grave form has been converted into the mild form."

One objection to this treatment is that chloral is very dangerous in chorea, as heart disease is so often an accompaniment of chorea. When, however, chloral is confined to the treatment of the grave form of the disease, and when proper care is exercised in the administration, it seems to me proper to use it—especially in children. The extreme danger to life of this form of the disease, and the really wonderful results of the chloral treatment, justify the risk.

In this connection and in conclusion, I will report two cases of chorea treated by me at St. Joseph's Hospital during the service of Dr. Leonard Hart. Elizabeth D.,

of Little Falls, aged 15, was admitted January 20, 1907, suffering from the grave form of chorea. The patient was anaemic and much exhausted and the heart lesion was present in a severe form. She was given the usual routine treatment for two months. Fowler's solution was given as high as fifteen minims three times a day, combined with iron and large doses of bromides. The patient continued to get worse until at the suggestion of Dr. Hart, the chloral treatment was tried. In all, 325 grains of chloral were given and the patient was kept asleep for three days. When she woke up she was practically free from choreic movements. Under tonic treatment, her general health improved and later she was discharged cured.

The second case was Louis B., aged 12. He was a private patient of my own and had been under my observation and treatment for several weeks with no improvement—in fact, he was getting worse. I obtained the consent of the parents to use the chloral treatment upon him and he was sent to the hospital April 21st, 1907. He was at once put on the chloral and had taken 200 grains when his mother became alarmed at his condition and demanded that he be sent home. The treatment had to be suspended and as soon as he was from under the influence of the drug he was removed to his home, April 26. I then put him in bed and, under the supervision of a trained nurse, I continued the treatment. About 300 grains of chloral in all were given. He woke up cured. In August of this year this patient again suffered from an attack of chorea. The attack was milder in form and yielded readily to the ordinary treatment. This boy was in my office December 5th, 1908, and his general condition was good and he was entirely free from all choreic movements.

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A bilateral thickening of the nasal septum means either an old traumatism or gumma.—*American Journal of Surgery.*

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Traumatic perforations of the septum have thin edges; in syphilitic perforations the edges are thickened.—*American Journal of Surgery.*

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A diffuse swelling of the orbit, moderate exophthalmos, intense pain and tenderness and marked edema, mean an infection extending deeply into the orbital planes. Unless treatment is instituted, the eyesight may be lost, or the infection may extend along the course of the optic nerve resulting in meningitis or sinus thrombosis. Wherever there is fluctuation, early incision is necessary; and free drainage of the infected area is of paramount importance.—*American Journal of Surgery.*



## PEDIATRIC DONTs

By **Karl H. Goldstone, M. D.**  
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Pedagogy of modern times recognizes teaching by negation, or arriving at conclusions by the process of exclusion, and teachers in medical schools to-day are taking advantage of this method with the full understanding of its convictions and truisms—it is just as important to realize what one is not to do, as it is to know the accrued facts. Just ponder a moment and review in your mind your teachings in the past whether gathered by textbooks, lectures, practical demonstrations or personal experience, and it will at once become evident that at least an equal share of your medical armanentarium is composed of the things that you know you ought not to do, viz., not to instill atropine in a glaucomatous eye; not to tolerate carbohydrates in diabetes; not to administer chloroform to patients with advanced cardiac disease; not to fail to remove all neighboring lymph-nodes in operating on cancer; not to allow drinking of alcohol in gonorrhea, etc., etc.

With this dogmatory in mind I have formulated an antilogy or category of negations:

Don't, above all things, fail to take a complete anamnesis before attempting to arrive at a diagnosis. In no other branch of our science does a detailed history go further in aiding to formulate a correct understanding of disease in pediatrics.

Don't forget that the future health and even existence of a child is determined by its nutrition in the first year of life.

Don't fail to note the fact that the chief predisposing factor to consider in determining the whys and wherefores in any diseased state in childhood, is the antestatus heredity.

Don't forget that all authorities now agree that lues in either parent manifests itself in the offspring without exception, and don't lose sight of the fact that signs of lues do not always evince themselves in early infancy; they may appear 5 to 20 years later. (R. W. Taylor.)

Don't fail to remove every vestige of clothing before attempting to examine a child. You may overlook evidences of disease which have vital import.

Don't under any circumstances fail in your routine to examine the vagina in a female child. Mothers either from false embarrassment or neglect, fail to call attention to the presence of any discharge, and don't lose sight of the fact that gonorrhea, while amenable to treatment in the early part of its course, later on is almost impossible to cure.

Don't ever neglect to percuss for the thymus in infants. Remember that a large percentage of sudden deaths in infancy is due to hyperplasia of the thymus (Baginsky-Grawitz).

Don't forget that empyema may be primary and does not always depend on a pre-existing pneumonia, and don't neglect, when in doubt, to put a needle in the chest. It can do no harm and frequently is the means of saving the life of the child.

Don't forget to put your finger in the throat of a child who comes to you with a history of a sudden aversion to taking the breast, and in whom the cry is peculiar, and who has dyspnea without there being signs in the lungs. I find that retropharyngeal abscess is more frequently overlooked than any malady of childhood. (See author *N. Y. Medical Journal*, February 16, 1906.)

Don't hesitate in making a rectal examination in a child who is passing blood via the anus. Intussusception is another condition that is rarely recognized until brought to the hospital, and then the child is usually in a moribund state.

Don't forget the fact that enuresis is amenable to suggestion and can be controlled by mental means. (*Church Archives of Pediatrics*, September, 1906.)

Don't, for the sake of the future health of the child, tolerate a "pacifier," for, as I have pointed out (the injurious habits and practises of childhood — *Medical Record*, June 20, 1908), they may be, and usually are, productive of adenoid vegetations in the pharynx and deformities of the mouth.

Don't fail to think of masturbation as the causative in any infant or child who is brought to you for nervousness and mental irritability. I have seen infants as young as five months masturbating, followed by a train of nervous symptoms which were due to this cause.

Don't call any fever whose source you

cannot detect malaria. Malaria is after all rare in childhood.

Don't blame every ontoward symptom or pevishness in infants to dentition. Holt states that in 95 per cent. of cases something other than teething is the cause of the symptoms.

Don't, if you want a clear conscience, ever prescribe opium or any of its derivatives to infants. At the service of the Mt. Sinai Hospital Clinic we have a fast rule—"No opium in children under fourteen years of age." To the skeptic let me state that we obtain the best results without the use of opiates.

Don't hesitate in the diarrhea of infants to interdict breast or other milk feeding. You will be surprised to find your patient thriving on barley water and weak tea, and your enteritis cured *even without the use of drugs*.

Don't fail to take a culture of the throat in any infant brought to you with a dry metallic cough and a slight rise in temperature. Laryngeal diphtheria is much more common than one would be led to believe from reports.

Don't fail to realize that many different conditions in the child can be productive of cerebral irritation followed by a train of symptoms simulating meningitis. These are the cases of meningitis (?) that get well in a day; the true condition is after all one of meningism.

Don't forget to have the eye fundus examined in any child who after the fifth month fails to hold up its head and who does not grasp objects, and in whom hyperacusis is present. From a large clinical experience I am led to believe that Tay-Sachs amaurotic family idiocy is not so rare as we were formerly wont to believe.

Don't resort to artificial feeding unless absolutely compelled to; poor mother's milk is oftentimes better than the best regulated artificial feeding. (Cammerer.)

Don't, if you consider yourself a reputable physician, ever resort to the term "He will grow out of it." The only things that children grow out of is their clothing.

Don't expect to find the morbus caeruleus present in every case of congenital heart disease. For as Jules Simon, the French writer, has shown, there may be cyanose blanche or pallor of the skin.

Don't designate every twitching in a child as chorea. Remember as a result of mimicry, children develop habit spasm.

Don't forget that true pavor nocturnus

is nothing more or less than nocturnal epilepsy.

Don't run away with the idea that the only rule you have to follow in treating children is simply lessening the adult dosage of medicine; for, after all, drugs play a small part in the successful management of children's diseases.

Don't forget that the day of the croup kettle and oil silk jacket in the treatment of pneumonia is past. Keeping the baby out doors all day and proper feeding—these are the great life savers.

Don't, when in the presence of a puzzling rash accompanied by temperature, forget the existence of Duke's disease.

## THE NECESSITY FOR SCHOOLS OF INSTRUCTION FOR PUBLIC HEALTH OFFICERS.\*

By John L. Leal, M. D.,  
Paterson, N. J.

As I have already read, before this association, at least two papers upon this subject, it is not my intention to occupy very much of your time to-day. I shall not present to you a paper, but only a few suggestions, which will, perhaps, cause some criticism, and in that way increase the general interest of the association in one of the most important subjects which has ever been before it. I am perfectly willing to suffer the results of any criticism that may be aroused, if only it may result in the advancement of a good cause.

I take it that the committee, in formulating the title, intends the words "Health Officers" to include all those engaged in theoretical and practical public health work, although in this State the term is used legally and popularly as meaning the executive officers of health. It seems to me that there should be a very material difference in the methods required for the education of the executive officers and those of whom professional knowledge is required in dealing directly with patients suffering from preventable disease, and the amount of knowledge required by them to fulfill their functions, and the methods employed in the education and training and the amount of knowledge required of subordinate officers performing purely mechanical functions.

As sanitary science, or public hygiene, or public health work is the science of the prevention of preventable disease and the spread thereof to the public, and as the science, and, indeed, the only science, which has to do with the knowledge of such disease in its various manifestations, is the science of medicine, it seems to me that, theoretically at least, the position of executive officer of health and all positions in which such disease is directly dealt with, should be filled by physicians. I am aware that such

\*Read at the annual meeting of the New Jersey Sanitary Association, at Lakewood, December 4, 1908.



positions have been most satisfactorily filled by laymen, and, indeed, I know personally of such instances. I am also aware of the fact that the ordinary physician, gifted and proficient as he may be in other branches of the profession, is, as a rule, a lamentably poor sanitarian. For this, however, I do not hold the physician personally responsible. The fault lies with the methods of education, due to the greater attention paid to other branches of the profession. Individual physicians, whatever criticism may be due to the schools, have always realized the equal importance of their two-fold functions, which I should personally place in the following order: First, the prevention, and, second, the cure of disease. Sanitary science had its birth in this realization of individual physicians, and by their investigations and labors it has been brought to its present standing. Their labor, time and thought, devoted to the subject, have been unselfish, and the results have often been inimical to their material interests.

In this respect, their position has been different from that of the members of other professions and vocations, brought in one way or another in close touch with sanitary science, in that their knowledge and training were, in the first place, absolutely necessary as a foundation for the science; and, in the second place, that the others have reaped material advantages as a result of their labors and of their alliance with the science which they—the physicians—have founded. Such others have been quick to see, not only the good accruing to the community by the protection of the public health in the prevention of disease, but it has also happened that in their efforts to further this most commendable cause, their own material interests have, incidentally, at least, not suffered.

In their zeal, and limited in their knowledge by the limitations of the time, these physicians discovered, as they believed, a most serious menace to the public health in the plumbing, drainage and sewerage systems which the luxury of advancing civilization demanded almost as a necessity.

No profession or trade more quickly were brought to the realization of these dangers, and no body of men ever made more strenuous efforts to avert them, than did the plumber. Incidentally, his bill to the householder increased from 25 to 40 per cent. per annum. To-day the scientific sanitarian recognizes the error of his predecessor, and perhaps some of us our own. He knows that the public health would be far more benefited if this 25 to 40 per cent. were expended upon the gas piping, rather than upon the plumbing systems of dwellings. It is hard, however, to overcome the effects of error, and in most places plumbing codes adopted twenty years ago are still in existence.

The engineer was also an early convert to sanitary science. Actuated unquestionably by the desire to advance the public good, he developed a new and a very large field, the rewards acquired in which have been, incidentally, very gratifying. There can be no question of the value of the work accomplished in this field when scientifically directed. I would place the engineer, next to the chemist and the bacteriologist, as the most valuable aid to the true sanitarian. Neither can it be denied that sewerage systems have been constructed, filter plants have been built, and other engineering works of most expensive character have been

undertaken, when the sought-for results could have been obtained by the following out of true sanitary laws upon far more economical and just as effective lines.

The non-medical bacteriologist and chemist have also stepped rapidly to the front, without the mental training, the habit of mind and the professional knowledge acquired in the study and practice of the medical profession—the root of sanitary science. They have practically formulated the principles of a science based almost solely upon purely theoretical knowledge and results obtained within the walls of laboratories.

Even the non-medical college professor (actuated by the importance of the subject and the vast benefit to mankind to be obtained through it), having left his chair which he has devotedly occupied from the time that he, on account of the theoretical and practical knowledge which he had acquired throughout his previous life by study and experiment in some other special branch of science, was called to it, has done his part, whether by the writing of textbooks for the guidance of those who have been and are engaged in the practical work of sanitation, or by serving the public in the giving of testimony from the witness-stand.

It is always most gratifying to the medical worker in sanitary science to follow (as seems to be his tendency to do) these able representatives of other professions in their work, and to have his knowledge (which he should have acquired in his study and practice of his own profession) added to by these non-medical gentlemen.

It is always most interesting to him to study their books and listen to their disquisitions upon, we will say, such a subject as typhoid fever—a disease vitally affecting the public health. To be sure, he may have attended, examined, sat by the bedside of hundreds of cases of this disease and traced many of them to their source of infection, while the writer or speaker referred to has never seen such a case, but through his reading, the study of laboratory results and his own original thought, he is able, as it seems, to place his theoretical knowledge above the practical knowledge of the physician.

I cannot help believing, however, that these leaders of sanitary science would surpass even their present capacities, had they had the training, the knowledge theoretical and practical, and the habits of thought acquired by a medical education.

I am of the opinion, therefore, that the beginning of the professional education of all health officers, executive and those coming into immediate relations with preventable disease, should begin in the medical school. These schools should be forced to give to this branch of medicine the position in their curriculums that its importance demands. The degree of doctor of medicine, issued by any school of medicine, should include doctor of sanitary science. There should be clinical opportunities for this branch, as well as for the others, and his further practical experience could be acquired by the physician outside of the school, in the same way as he is forced to acquire experience in other branches of his profession.

The common argument used in favor of a lay executive health officer is that the physician is not, as a rule, a good business man, and that he can render better service in a subordinate position than at the head of a department of

health. In answer to this, I would say, in the first place, that many physicians are good executives and possess more than the average business ability. Many others are capable of acquiring it, if opportunity be given. In the second place, it is quite possible to devise means to relieve an executive officer of a great deal of the routine business administration, by conferring at least part of it upon the secretary or some other designated officer. That the executive head, however, of any department of health of importance should be a medical man, I am firmly convinced.

The subordinate officers, who come into immediate contact with disease, or who fulfil functions requiring medical knowledge, should, without doubt, also be physicians. I mean by this, those who make diagnoses, who inspect subjects, school children, etc., and those who take cultures, etc. The registrar should also be a physician, or at least should be under the direct supervision of a physician. All mortality reports issued should be vouched for by some physician who should be responsible therefor. The bacteriologist and the chemist should either be medical men, or should be under the supervision of a medical man. Under them should be the food, milk, drug inspection, etc.

Other subordinates in public health work do not need the same scientific education and training as the above, but they should be instructed in the general scientific principles of sanitary science, and should be so practically instructed in their own special functions as to be able to fulfill these functions in such a way as to obtain the very best results.

The importance of a proper training for the scientific technique for the taking of samples of water, food, milk, drugs, etc., the inspection of premises, disinfection, etc., cannot be overestimated, as upon these details depends so much the actual results accomplished by the department.

Of the utmost importance is the general knowledge of the principles upon which this technique is based. The reasons why these are done in a certain manner; the ends sought for; the disinfection which may accomplish good, and that which is useless; the condition of a tenement house which is dangerous to human life, and that which is not; the pile of dirt which may breed disease, and that which will not. The theoretical and practical knowledge must go hand in hand in order to secure the best results.

This State (acting principally through the efforts of this association) has not been backward in comparison with others, with one or two exceptions, in striving for the better education and training of those engaged in public health work.

The first step taken was the appointment of a board of examiners, by Rutgers College, in the year 1898. This board gave no instruction, nor was any special instruction given in connection with it; but it twice each year held examinations for the benefit of those applying to them, and issued certificates to those successfully passing the examinations. It probably accomplished some good in encouraging some of those already in the work to further study and effort, and also encouraged to study some of those who were ambitious to enter upon the work and were hoping to do so through the aid of the certificates issued by said board.

The greatest weakness of the movement, however, was the lack of provision for inspection and training. The defect was fatal, and the board gradually ceased to exist.

The next step was the act of 1903, requiring the holding of licenses by those engaged in public health work, and the institution of a board appointed by the State Board of Health, to examine applicants for such work. This was a much more important step in advance and has accomplished, unquestionably, a great deal of good. There are several amendments required, however, to this act, and to other so-called Board of Health laws, which would place this State in a still better position.

First—I would suggest that in certain counties with no large cities, the towns of which are not populous and wealthy enough to pay for a proper health administration, that the local boards be superseded by county boards. In this way, unquestionably, a far better sanitary administration could be maintained than will be maintained by the present sanitary districts, sparsely settled and poor as they are.

Second—That in cases where the above will not apply, two or more adjoining towns be allowed to unite and form one sanitary district, so that by their united efforts a proper sanitary administration may be maintained, which could not be done by each one alone.

Third—That in the smaller and poorer sanitary districts, not able for one reason or another to take advantage of either of the two above outlined amendments, it be allowable to have at the head of their sanitary administration a subordinate health officer, that is, one not necessarily holding a license as an executive officer of health, but an officer of lesser grade.

I do not approve of this last suggested amendment, except as a makeshift, but would far prefer bringing all the smaller sanitary districts in the State under one of the first two amendments.

The sanitary service of these smaller districts is of great importance, not only to the health of the inhabitants of these districts themselves, but also to the health of the inhabitants of other sections of the State. Much of the preventable disease existing in our cities to-day is brought to those cities from these outlying districts and is due to the lack of proper sanitary supervision in those districts. There is no instance in which we are more our brother's keeper than in the matter of sanitary science, and it is of as much importance to the inhabitants of our larger cities that every section of our State should have proper sanitary supervision, as that each and every city should possess it.

I have already expressed the opinion that the chief officer of a health department should be a physician. Practically, I would at least insist that no such license be given to any one except to one fulfilling the strictest requirements of such a position. I doubt very much if it is possible, in this State, for us to provide the facilities required for the instruction of such men. I do believe, however, that it is far more important to us, and also possible, to provide for the instruction and training of men for the subordinate grades. That some such provision should be made seems self-evident, although as yet it has not been accomplished. A committee of your association has been in existence for several years and has endeavored in various ways to secure such facilities. The only institution



in the State which has been willing to consider the taking up of the necessary courses is Rutgers College. This institution probably is also better situated to do so than any other, in connection with its Agricultural Department, which is supported by the State. The class of students which this school draws are also of the class which might be readily induced to take up the work of sanitary science.

Your committee has endeavored to make the necessary arrangements with this institution, but as yet has been unsuccessful. The stumbling block has been the estimated cost to the institution of the necessary courses. This cost is estimated by President Demarest at \$20,000. Inasmuch as a large appropriation for another purpose was voted to Rutgers by the last Legislature, it was impossible then to accomplish anything in this line. Perhaps, however, it may be possible to reduce this estimate and obtain a sufficient appropriation from the State at the next legislative session to carry on the work.

In order to obtain the practical instruction and training required, the only possible way, it seems to the committee, is to do so through the Newark Board of Health. This board, through its officers, its system and its equipment, is better able to give this instruction and training than is any other board in the State. We are encouraged to hope that the necessary arrangements may be made through this board; but, of course, it is the sense of the committee that both theoretical and practical instruction should be given.

If the association sees fit to continue the committee, further efforts upon these lines will be made. However that may be, I trust that the association may realize the great importance of the subject and may promote it to its utmost ability in whatever way may seem best to it.

## Abstracts from Medical Journals

### OVER-CIVILIZATION AND MATERNITY.

(From *American Journal of Medical Science*, October.)

To Dr. F. S. Newell, of Boston, the conclusion seems inevitable that a type of woman formerly very rare is now becoming relatively common. He illustrates this by three case histories. The working woman—the type usually seen in hospitals—generally goes through her pregnancy and labor as the natural process it is commonly supposed to be. With the over-civilized woman, on the other hand, either great variations from the normal are possible in individual cases, or differences in class and environment have developed new conditions which will eventually necessitate the development of a new procedure. Pregnancy entails in the latter a marked reaction in which nervous symptoms are most likely to be exaggerated. Faulty elimination and autointoxication are more common, the woman is unduly sensitive to outward influences and minor discomforts. She often comes to labor, consequently, in a condition physically unfit to withstand any serious strain. The convalescence is apt to be long and unsatisfactory and we have also to reckon with a

nervous breakdown. Nursing is impossible, or if satisfactory at first, has to be given up in three months or so. The elimination of the unfit during infancy, more common in the poorer than the better classes, while doubtless a factor, cannot alone explain the prevalent conditions. The city-bred girl of to-day, carefully shielded from undesirable surroundings, is brought up like a hothouse plant, lacking outdoor exercise and fresh air, is overstrained at school, and the strain continued out of school with the pursuit of accomplishments such as music practice, etc. Later, her hours are late and social engagements many, and even if athletic, the time spent on golf, tennis, etc., is taken from the rest period, during which the girl of a previous generation was recuperating from the strain of social obligations, balls, etc. It is necessary to take into consideration the need of change in methods which is entailed by this condition. If the patient is not only to be delivered alive, with a living child, but is to be brought through in such nervous and physical condition that she will be able to assume the function and duties properly belonging to her after convalescence, she must be watched through her pregnancy; and if, after due consideration, the obstetrician has decided that a certain patient will probably go through labor badly, immediate delivery must be undertaken, no matter what the stage of labor, at the first indication of unfavorable signs. When it seems absolutely certain that labor will be unsatisfactory, pregnancy should be ended at a set date by operative procedures, by the method least liable to result in injurious effects to the future health of the patient. Until recently in the absence of definite pelvic contraction or faulty relation between maternal and fetal parts, operation was limited to forceps or version. But the author says that in the case of an elderly primipara with rigid soft parts, the dangers of a pelvic delivery leaving serious after-effects are materially increased, and in these cases there is no question that abdominal delivery will probably give the best results. Cesarean section, performed before the beginning of labor under proper conditions and by a competent operator, is nowadays practically without danger to life or to health, and there can be no doubt that in many cases it offers distinctly the best chance for a proper recovery.—*A. M. A. Journal*.

### ILLUMINATION OF SCHOOL ROOMS.

Dr. M. Standish, in *Ophthalmology*, gives the following as the essential factors in the proper illumination of schoolrooms:

1. The walls should be painted a very light color, preferably an exceedingly pale green or buff.
2. The wooden finish of the room and desks should be light in color.
3. The window shades should be able to exclude direct rays of the sun, diffuse daylight freely, and also in the evening reflect a generous proportion of the light which falls on them.
4. Direct illumination is desirable.
5. The lighting stations should be so arranged that no annoying shadows shall fall on the pupil's desk.
6. The newer forms of incandescent lamps and Zalinsky shades, when properly arranged,

can give a candle foot illumination of 2.5 on each and every desk in the ordinary schoolroom; and finally,

7. In most cities the expense of electricity, used in the manner above described, is not so much greater than the cost of gas as to be prohibitive.

### THE SICK CHILD.

Dr. T. M. Rotch, Boston, in the *Monthly Cyclopaedia and Medical Bulletin*, urges the importance of understanding that the infant and child are neither mentally nor physically the same as the fully developed adult. All the tissues, all the mental and physical conditions, differ widely between the first year and the second. The infant at birth is a mere automaton. Rotch describes the progress of development through the first, second and third years. With regard to children, he points out that the chronologic age is not necessarily the true age. It is the anatomic age which practically determines what the child can and should do mentally and physically without harm. Rotch urges the importance of a clear conception of the normal in the healthy infant and child. When one knows how the healthy infant or child ought to look and to behave, it will be easier to recognize how such individuals look and behave when ill. Illness is often overlooked on the ground that a child is spoiled; it is difficult to spoil a healthy child. The buoyancy, cheerfulness and good nature of young children come from a feeling of comfort and general vigor produced by healthy tissues and normal functions. The healthy child rebounds quickly from a cross word, while a sick child resents it and dwells on it. It is difficult to locate the source of pain in very young children and babies. The stomach is often blamed for reflex localized pains. Different children have different temperaments. Some have easily excited nerves, other quiescent nerves. Rotch discusses the confounding of dulness, stupidity, laziness, and other supposed mental conditions, with physical disease.—*A. M. A. Journal*.

### ITCHING.

Dr. A. W. Jamieson, in the London *Lancet* September 26, 1908, says that we may interpret itching as "a functional disorder of innervation which may be produced by external or internal causes alike." It is essentially a surface sensation, and its most marked developments are to be found in those lesions that mainly affect the epidermis. Pressure is inimical to itching. The proximate cause of itching is closely connected with that of urticaria, more particularly that form known as urticaria factitia, or dermatographism, in which the vasomotor mechanism is so sensitive that wheals can be evoked by friction. Jamieson cites Unna's theory, that itching is due to a disproportion between the pressure of the tissue juices and that of the limiting corneous layer, but he considers that we must probably assume, in addition, a degree of hyperesthesia. Scratching indulged in to mitigate the sensation is not in itself harmful; it is the degree to which it is carried, not the act itself, which is injurious. He cites the rough towel, flesh brush, etc., in daily use. He discusses the association of, pruritus

with parasites and with definite skin disease, and points out that plants as well as insects may set up a dermatitis and induce itching. Poisons generated from within account for the itching in severe jaundice, in Hodgkin's disease, and at the climacteric in women. He discusses pruritus ani, and says that besides threadworms, piles, fissures and prostatic disorders, the liver must be considered assuredly at fault in many cases, possibly as a dependent of some cardiac trouble. Pruritus may be a symptom of pelvic cancer. Pruritus vulvae suggests glycosuria, not necessarily diabetic, as this form is perhaps more aggressive in stout gouty women, not diabetics. There is a peculiar itching of the fourth toe, and within the meatus of the ear, the nostril and the tongue, which are characteristic minor forms. Itching cannot be treated solely as a substantive lesion. Medicated soaps—menthol, nicotin, naphthol, etc.—are useful. A dry surface with slight desquamation suggests warm baths, under blood heat and containing some freshly prepared starch jelly, with inunction of glycerin of starch after gentle drying in climacteric cases. A course of subcutaneous pilocarpin injection, administered each night, and extended over a couple of weeks, is often useful. Silk, Indian gauze or linen underwear should be worn next to the skin, and if thicker or warmer undergarments are required, they should be worn over the others. He goes at considerable length into other forms of treatment of itching.—*A. M. A. Journal*.

### LACERATION OF PERINEUM.

T. J. Watkins (*Surg., Gyn., Obst.*, July, 1908) describes an operation for complete laceration of the perineum for which he claims these advantages: 1. The external sutures are all distant one-half inch or more from the anus and consequently minimize the danger of infection. 2. There is no constriction of the skin and connective tissue about the anus. 3. Individual suture of the muscle. 4. Absence of any danger of a recto-vaginal fistula as a result of the operation. 5. A relatively small amount of suffering following the operation. 6. Enemas can be used in the postoperative treatment without the usual danger of injury or infection. The technic is as follows: A transverse vaginal incision one-half to one inch long is made through the vaginal mucosa, at least half an inch beyond the uppermost part of the rectal tear. The higher up the incision the greater the security against infection. When there is not much injury to the rectal wall the incision may be made at least one inch above the rectal opening. A sharp-pointed straight scissors is pushed under the vaginal mucosa from the incision down to the retracted end of the sphincter ani muscle on one side, and the blades are opened so as to freely separate the tissues. Blunt dissection with the scissors is done in like manner on the other side. The connective tissue, between the two canals made by the scissors, is separated by blunt dissection or by incision down to the rectal wall. The end of the muscle is now caught on either side with a Pean or rat-tooth tissue forceps and drawn into view. The two ends of the muscle are sutured with No. 1 chromicized catgut. The suture should be carried through the muscle and surrounding con-



nective tissue two or three times and then tied (using only one knot). When the suture is completed the muscle is allowed to drop down to the bottom of the incision. A test of good approximation of the muscle is a restoration of the corrugations of the skin that normally surround the anus. The remainder of the operation is the same as for relaxation of the vaginal outlet, and may be done by an Emmet or Hegar operation.—*American Journal of Obstetrics*, December, 1908.

### MUSTARD TREATMENT OF SCARLET FEVER.

(Dietetic and Hygienic Gazette, Nov., 1908.)

Dr. S. Floersheim, Medical Council, relates the results obtained in the treatment of scarlet fever by mustard baths.

The first patient which he treated was a child, three years of age, having a severe attack of scarlet fever. The child was semi-conscious, with a temperature of 106.3 degrees F., a pulse of 180 and respiration 47.

The child was then given a hot mustard bath at the temperature of 110° F. Three tablespoons of the powdered English mustard were thrown into about 30 gallons of water and the child was immersed in the water up to his clavicles, care being taken not to allow any water to enter the child's mouth. At the end of fifteen minutes the child was taken out and packed lightly and quickly, without drying, in a woolen blanket and put to bed. The child's skin was intensely red and there was a general improvement in the facies of the child. Another bath was given to the child six hours afterward followed by improvement; the pulse became regular, the respirations deeper and much slower. This was not followed by any complications and eventually the child made a rapid recovery. The author states that the bath should be repeated in from three to six hours, if necessary, according to the severity and necessity of the case.

The following facts have been observed from this additional method of treatment:—

1. A decrease or disappearance of the convulsions; 2. A decrease in the elevation of the temperature; 3. A decrease in the rapidity of pulse rate; 4. A shortening of the actual pyrexia stage of from three to fifteen days; 5. A noticeable decrease or absence of tonsillar, nasal, kidney and aural complications; 6. A more rapid and shorter exfoliating period; 7. An increase in the strength of the heart and pulse beats; 8. An increase in the depth of the respirations; 9. An increase in the general muscular tone of the patient; 10. A more rapid convalescent stage.

### ABDOMINAL COMPLICATIONS OF TYPHOID FEVER FROM A SURGICAL STANDPOINT.

At the Philadelphia County Medical Society meeting, October 28, Dr. Francis D. Patterson, in a paper on "Some of the Abdominal Complications of Typhoid Fever from a Surgical Standpoint," said he had collected from literature a total of 21,215 cases of typhoid in which 671 perforations occurred, a frequency of 3.16 per

cent. Figures of the census bureau show the mortality from typhoid fever during the years 1901 to 1905 inclusive in the registration area to be an average of 10,458 deaths per year. In 1906 this was increased to 13,160 deaths. To these, Pennsylvania contributed 3,917 deaths from the disease in 1906, and in Philadelphia from January 1, 1903, to September 15, 1908, there were 32,218 cases of typhoid fever with 4,930 deaths. One death in every three was due to perforation, which would give 1,643 perforative cases in Philadelphia alone during that time. Statistics show that perforation is equally frequent in children as in adults and the existing causes are as a rule mechanical. Cases in the literature show that perforation may occur during any period of the disease and in convalescence but is most common between the second and fifth week inclusive. While in the majority of cases the lesion is found in the ileum, no portions of the intestinal tract are exempt. The lesions in typhoid are usually located on the free border of the intestine opposite to the mesenteric attachment. The blood supply here being relatively poor, there is a predisposition to necrosis and perforation. When this takes place it is usually into the free peritoneal mesentery. The symptoms should be divided into those occurring at the time of perforation, and those of the succeeding peritonitis. There is no pathognomonic sign of perforation.

An accurate diagnosis is difficult in many cases. The prognosis of every case of perforation depends upon the celerity with which operation is performed and the bacteriology of the resulting peritonitis. The streptococcal infections are usually fatal while the chances of recovery are good in those due to the colon bacillus. The necessity of a close co-operation between physicians and surgeons in the management of cases of typhoid fever was emphasized. The literature shows that typhoid fever patients stand operative interference better than would be expected.—*Penn. Med. Jour.*

**Dog Bites.**—Baker, in *Detroit Medical Journal*, August, 1908, enters a plea against the idea that every dog bite has to be cauterized, which he compares with the old idea that every patient with asthenic fever had to be bled. While every dog bite is a serious matter, by tying up the dog and watching him we can weed out the small number of bad cases. Taking the patients within a reasonable time—two or three weeks for the general run, and a few days for face cases—the Pasteur treatment is reliable, and as no one would care to rely on primary disinfection of the wound and neglect immunization if the dog developed the disease, the cautery becomes of little use. It should be used, however, if the Pasteur treatment is out of the question, and if the dog is unknown or is not under proper restraint for observation. If there is any reason to suspect that the dog is rabid, the immunization treatment should be applied at once. In this case there is a gain in safety from cauterization, but in the general run of bites the cautery is unnecessary, increases scarring, leaves necrotic tissue to delay healing and to assist infection, and increases the degree and duration of disability. Suturing is bad and should be avoided as much as possible. When it is necessary to cauterize, nitric acid should be used, and the cauterization should be done thoroughly, under anesthesia if need be.

## Reports of Clinical Cases.

### TRAUMATIC INJURIES TO THE EYES.

By Charles J. Kipp, M. D., Newark, N. J.

#### Perforating Wound of Sclerotic and Ciliary Body; Complete Recovery.

Mrs. A. V., about 40 years of age, was first seen by me December 10, 1907. She stated that she had never had a traumatic injury or a disease of her eyes till yesterday when, while shaking out a tablecloth, a pin flew against the lower lid of the left eye and penetrated the lid. She pulled the pin out at once. She applied cold water to the lid and bathed the eye with a weak solution of boric acid. As the eyeball appeared bloodshot, next morning she thought it best to consult me about the injury.

I found the right eye in normal condition with perfect vision. The lower lid of the left eye was slightly swelled, but no wound was visible. The conjunctiva of lower lid and of the lower half of the eyeball was slightly injected. I could find no injury to the eyeball, although I made a most careful examination with the pupil dilated at maximum with hematropin. The vision of the left eye was the same as that of the right. I assured the patient that the injury was not of a serious nature and advised her to continue the cold application to the lids.

Dec. 13.—Patient returned to-day as she has suffered much pain in left eye since the day before yesterday. There is now injection of the whole bulbar conjunctiva, most intense in lower half. There is also slight oedema of the conjunctiva. The cornea is hazy throughout, but most marked in lower half. The aqueous humor is cloudy and a small hypopion is seen in lower part of anterior chamber, which is of normal dimensions. The iris is discolored and swollen. The pupil is adherent everywhere to the anterior capsule of the lens, and the pupil filled by a whitish grey exudate. No real reflexes could be obtained from behind the pupil. I immediately put a minute crystal of the sulphate of atropin on the inside of the lower lid and five minutes later placed a small quantity of dionin powder in the same place. The dionin produced but little swelling of the ocular conjunctiva, and none of the lids, and atropin broke up only the adhesion of the upper part of the pupil. I advised to have four leeches applied to the left temple and then to go to bed; to instil a 1 per cent. solution of sulphate of atropin and 2 per cent. solution of cocaine hydrochlorate every two hours; to apply warm wet compresses to the lids, and to take salicylate of sodium in 10 grain doses every 4 hours.

Dec. 14.—Patient had some pain in eye during the night, but is free from it now. The injection of eyeball is about the same as yesterday. The cornea is clearer and lustrous. The aqueous humor is much clearer and the hypopion is gone; the iris is still swollen; the pupil is dilated ad maximum and perfectly sound. The central part of the anterior lens capsule is still covered by the exudate. I again placed some

dionin powder in the lower conjunctival sac and continued the treatment as before.

Dec. 15.—Some pain in the eye during the night. The eye is in about the same condition as yesterday. Applied dionin which produced considerable chemosis.

Dec. 23.—During the past week the eye has remained in practically the same condition as last noted. Patient has had some pain in the eye at night, but not nearly as much as in the previous week. Dionin has been applied daily, and mercury and chalk in one grain doses three times daily has been substituted for the salicylate of sodium. To-day there is much less injection of the ocular conjunctiva, and is confined almost entirely to region immediately around the cornea. The cornea is perfectly clear, but on its posterior surface—Descemet's membrane—is now a deposit of fine particles arranged in the form of a pyramid, with the base below. The exudate in the pupil has disappeared, and the ophthalmoscope shows the vitreous to be full of dark floating opacities. The eye ground is not visible. The dionin was discontinued, otherwise no change of treatment.

Dec. 31.—All injection has gone; the sclerotic is perfectly white; the pupil is widely dilated. The deposit on Descemet's membrane is no longer visible. The vitreous is somewhat clearer. The optic papilla is just visible. Jan. 8, 1908.—The eye is free from all signs of inflammation. The vitreous is clear. The eye ground is of normal appearance.

Feb. 1.—The eye has continued to improve, and is now practically well. Vision is again as good as with the other eye. Since last entry I have examined the eye about every two weeks. It remains as last described.

The case here reported is of interest in several particulars:

I.—The point of the needle carried with it infectious material into the interior of the eye, although it had passed through the whole thickness of the lower lid and through the sclerotic.

II.—The violence of the inflammation of the iris and ciliary body caused by the introduction of such a small quantity of infectious matter.

III.—The efficiency of the treatment adopted. Within twenty-four hours after placing a minute crystal of sulphate of atropin and a small quantity of dionin powder in the conjunctival sac the aqueous humor was clear, the collection of pus in the lower part of the anterior chamber had disappeared and all the adhesions of the pupil were broken up. That the leeches helped to bring this about is probable. But in former years before I used the atropin in substance, and the dionin as suggested by Dr. Arlt, it took generally much longer even when leeches were applied, than it does now, and the patients usually suffered much more pain. The danger from poisoning from atropin should, of course, be borne in mind. I tip the patient's head toward the shoulders of the same side, place a very minute portion of the atropin in the temporal half of the lower conjunctival sac and exert pressure over the lachrymal sac, to prevent the atropin from going down into the nose. Used in this way I have never seen symptoms of atropin poisoning. Dionin is a most valuable addition to our materia medica. It is especially valuable in iridocyclitis from whatever cause. I use the powder usually not more than once daily and, as its effect usually



is less apparent after several days' use, I occasionally suspend its use for a few days and then resume it again, mostly with good effect. It unquestionably helps to relieve the pain, and I feel pretty sure that in combination with atropin it aids in breaking up the adhesion in acute cases. In old cases or in cases of relapse of an iridocyclitis with old and firm adhesions it seems to cut short the attack quicker than other means known to me. We certainly owe a debt of gratitude to Dr. Wolfberg, who introduced the remedy to our notice. It is an old experience that iridocyclitis from any cause is liable to relapse, and in order to prevent these relapses as much as possible, the pupil should be kept dilated by atropin or some other mydriatic for many weeks after all symptoms of inflammation have subsided.

IV.—The complete recovery in six weeks' time. My patient was by no means a strong woman. She has been through much sickness, and her power of resistance was not good. Since her recovery from the iridocyclitis her general health is better than it was formerly. Now—twelve months after the injury—the eye is as well as it was before the injury.

### Perforating Wound of the Cornea, Iris and Lens Resulting in Panophthalmitis.

Dr. C. J. Kipp.

The following is a case of a similar injury which was under my care some years ago before we used dionin in eye affections, it shows that most active treatment cannot always prevent destruction of the eye.

The patient was a girl of 12 years of age, and at the time of the injury was in robust health. While shaking a carpet she felt something strike her right eye, which gave her great pain. On searching for the object which struck the eye a brass pin was found on the right cheek. A physician was called in at once who prescribed cold application to the lids and instillations of a solution of atropin. I saw the patient 16 hours after the receipt of the injury. She was suffering much pain in the eye, and said that it was blind. I found the ocular conjunctiva to be much injected and oedematous. The cornea was slightly hazy throughout. Between the center and the outer margin of the cornea was an abrasion of epithelium and a faint greyish line extended from here through all the layers of the cornea. The anterior chamber was of normal size; the aqueous humor was somewhat turbid. The iris was discolored; the pupil was dilated, except at a place corresponding to the corneal wound where it was adherent to the lens capsule. The lens was hazy throughout and on its posterior surface was a star-shaped opacity. A wound in the lens capsule was found where the pupillary margin of the iris was attached to the capsule. The vitreous humor was so cloudy that the eye ground could not be made out distinctly. Vision was reduced to counting fingers at a few feet.

It was evident that the pin had perforated the cornea, iris, lens, and perhaps also the vitreous. I regarded the condition of the eye as almost hopeless, and so informed the girl's parents. The treatment consisted of four leeches to the temple, application of ice-cold cloth to the lid for an hour at a time at intervals of an hour,

instillation of a 1 per cent. solution of sulphate of atropin and the internal administration of the salicylate of sodium in 10 grain doses every 4 hours. On the following day the only change noticeable was that there was now a greyish yellow reflex from behind the lens. Warm applications to the lids were substituted for the cold applications. The pain in the eye was so great that small doses of sulphate of morphine were required to enable her to sleep. During the following days the swelling of the ocular conjunctiva increased, the aqueous humor became more turbid, and a hypopion made its appearance. The iris was more swollen and an exudation filled the pupil. The reflex from behind the lens became more yellowish. More leeches were applied to the temple and small doses of calomel were given instead of the salicylate of sodium. All of this, however, was of no avail. The inflammation soon involved all the structures of the eye—a panophthalmitis—and ended in perforation of the sclerotic coat near the outer margin of the cornea. This was followed by a gradual shrinking of the globe. She is now wearing an artificial eye in front of the stump.

Injuries involving the crystalline lens and vitreous body are known to be of a much more serious nature than those limited to the cornea and iris, not only because of the impairment of vision from the traumatic cataract, but because such injuries are much more likely to end in panophthalmitis as in the case here reported. The lens substance and the vitreous humor seem to be good media for the growth of the micro-organism introduced by the body entering them. In a number of cases similar to this one, I have introduced sterilized iodoform into the anterior chamber, either through the original wound or through a wound made for the purpose in the cornea as practiced by Haab. In a few cases it would seem to have prevented a destruction of the eye, but in most cases it failed to cut short the inflammation. In the successful cases, other means were also employed, and it is therefore impossible to say whether or not this treatment was of benefit. In cases in which the wound in the cornea is infiltrated at the time the case is first seen, or when the infiltration is developed later on, I have used with most excellent effect the galvanic cautery, which I put cold through the wound into the anterior chamber and heat it to a deep red while withdrawing it. If necessary this cauterization is repeated some days later. After the cauterization I use warm compresses of a boric acid solution constantly to the lids, and use atropin sufficiently often to keep the pupil widely dilated, if the corneal wound is situated in or near the center, but do without it if it is situated near the periphery of the cornea to prevent anterior synechiae. I never use myotics in such cases, as they almost always increase the iridocyclitis. In many cases where suppuration was threatened I have also made subconjunctival injections of the cyanide of mercury in 1:5000 solution and of a two to four per cent. solution of chloride of sodium, but without apparent benefit. I still use them in order that I may do everything that is known to have been of help in such cases. Mercury given either in the form of inunction or by mouth has seemed to me to be of much value in threatened suppuration of eyes, and I usually give it

if the salicylate of sodium fails to reduce the inflammation.

Frequent cleansing of the skin of the lids and of the conjunctival sac with a weak solution of the chloride of mercury or the cyanide of mercury or of boric acid was resorted to in most cases, while in others a sterile physiological solution of chloride of sodium was employed for this purpose with apparently as good results.

### Rupture of the Choroid and Hemorrhage in the Retina Following a Blow on the Eye.

Dr. C. J. Kipp.

The patient was a man 60 years of age, a clerk by occupation. His eyes have always been good, and the sight was perfect in both up to the time of the injury to the left eye.

Now the right eye is normal in every respect E. S=6/5.

The left eye was struck by a stone, as he thinks in the outer half, four days ago. The injury was followed by free bleeding from the eye or lids, which continued for two days. He noticed immediately after the eye had been struck that the vision of this eye was much impaired. He applied cloths wet with a solution of boric acid to the lids. Nothing else had been done since. I found the eye to be emmetropic and S=6/12. The lids were oedematous. I was unable to find a wound of either eyelids or eyeball. The external parts of the globe presented nothing abnormal. The lens was clear, but the vitreous was full of floating opacities. The optic papilla was normal in appearance. The retina was transparent, except in its outer lower part, where it contained a large extravasation of blood. Under this extravasation I could make out indistinctly a long rent in the choroid. I prescribed instillations of a 1 per cent. solution of atropin, three times daily. He was told not to use his eyes for near work and, in the hope of hastening the absorption, was advised to take a turkish bath twice a week, and to take iodide of potassium in 10 grain doses three times daily.

Five weeks later the opacities in the vitreous had almost entirely disappeared, but some of the extravasations of blood in the retina remained.

Nine weeks after the receipt of the injury all the blood extravasated in the retina had disappeared and the rent in the choroid was now distinctly visible. The length was about three times the breadth of the optic papilla, its breadth was equal to about double the diameter of a primary retinal vein, in its widest part. It was situated in the lower part of the ophthalmoscopic field and followed a somewhat radial course. When last examined the vision of this eye was as good as that of the other eye.

As interesting and unusual features of this case may be mentioned the situation of the rent in the choroid and the preservation of vision. As there was no break in the sclerotic, the rupture of the choroid must be classed among the indirect ruptures, and these are in the vast majority of the cases situated at the posterior pole of the globe, on the temporal side of the disc. In these cases it has commonly the shape of a crescent. It is probable that in

this case the unusual situation of the rupture was due to the fact that the blow struck the outer half of the globe. I have seen a number of other cases of indirect rupture of the choroid situated at the periphery, but as I have already said, they are comparatively rare.

The preservation of vision is, of course, accounted for by the situation of the rent in the choroid which did not reach close to the macula lutea. Unfortunately the vision does not always remain good in these cases, for I have seen great deterioration of sight follow similarly situated ruptures in cases that I have been able to follow up, for many years. Atrophy of the choroid and atrophy of the optic nerve seemed to have caused the impairment of vision.

### Lacerated Wound of Conjunctiva, Sclerotic and Choroid.

Dr. C. J. Kipp.

C. N., a farmer, 20 years of age, was struck by a stick in the right eye three days before he came to me. He had consulted a physician immediately after the accident, who had prescribed a boric acid solution for an eyewash.

On examination I found that his left eye was normal in every respect, and the vision of this eye was 20-15.

The right eye was as follows: The upper lid had been cut through its free margin near its middle. The cornea was intact and transparent. The ocular conjunctiva and the sclerotic of the outer half of the globe were cut through so as to expose the ciliary body and the choroid. The wound extended from just outside of the corneal margin as far as the sclerotic was visible, in the horizontal meridian. The anterior chamber was filled with dark red blood. He had just perception of light in this eye, but projection was uncertain.

I united the conjunctival wound by two stitches, and ordered cold application to the lids and a 1 per cent. solution of atropin every three hours. He lived out of town and travelled about thirty miles every other day to see me. Under this treatment, the blood in the anterior chamber was absorbed in about two weeks. After its disappearance the pupil was round and well dilated. The lens was found to be in its place and uninjured. The vitreous was full of opacities. The injection of the ocular conjunctiva gradually disappeared. Ten weeks after the injury all signs of inflammation except the opacities in the vitreous had passed away, but vision was still greatly impaired.

I did not see the patient again till five years later. At this time the vision of the injured eye was 6/18 with a—1, 5D cylinder at 30° to the temple. There was a scar in the free margin of the upper lid and a cilia in the scar was growing towards the cornea and rubbing against it. The conjunctiva of the upper lid in its outer half was somewhat swollen and red, and was drawn towards the eyeball by an adhesion. There was a long non-depressed scar in the sclerotic extending from near the outer margin of the cornea far back. There was no pigmentation in the scar. The cornea, anterior chamber, iris and lens were normal. The vitreous was perfectly clear. The optic papilla and the retina were normal, but in the choroid,



corresponding to the site of the scar in the sclerotic was a scar extending almost to the macula lutea, it was fringed by pigment, and the choroidal pigment was irregularly distributed nearly up to the papilla and on both sides of the scar. Retinal vessels could be seen to cross the scar.

The fact that six years after the injury vision was fairly good and that the eye was free from all signs of inflammation, shows that recovery from extension and lacerated wounds involving the ciliary body and the choroid are not necessarily fatal to the eye. I have treated a large number of similar injuries to the eye, and have seen many of these cases do as well as the one above reported. In others plastic or purulent choroiditis developed, mostly in cases with prolapse of the vitreous, and ended in destruction of the eye, notwithstanding most active treatment.

(TWO OTHER CASES REPORTED BY DR. KIPP  
WILL APPEAR IN MARCH ISSUE.)

### AN UNUSUAL CASE OF INTUSSUSCEPTION.

Reported by P. Boyson, M. D., Riverton, N. J.

I wish to report the following case of Intussusception occurring in an adult, first because this form of intestinal obstruction is rarely met with in a grown person; secondly, because of the absence in this case of the classical symptoms of the condition, and thirdly, because it suggests diarrhea as an etiological factor of the disease.

The patient, Miss A. K., a vigorous woman of 22 years of age, was taken ill on a Wednesday night with severe abdominal cramps and diarrhea which she attributed to the eating of cucumbers the night before. Her condition continued till the following Saturday with only a slight, if any, improvement. She had proposed to a friend to go to Philadelphia on that day. This she did. The trip, however, proved too much for her. The following night she was taken with the most excruciating abdominal pains which were not localized but general. Dr. Alex. Marcy, Jr., was called in on Sunday, and I saw the patient for him at noon that day for the first time. She was still having a good deal of pain and was menstruating. The bowels had not moved for some hours. There had been no vomiting or nausea at any time. The temperature was normal, but the pulse impressed me as being slow—sixty per minute. An abdominal examination did not reveal the presence of any tumor. Slight tenderness was elicited on the left side on deep palpation. There was neither rigidity nor distention. As I had seen, within a day or two, three other patients who presented much the same symptoms, I concluded that I was dealing with a catarrhal inflammation of the bowel associated with dysmenorrhea. I accordingly left some calomel and bismuth and administered a small dose of morphia hypodermatically. Dr. Marcy saw the patient the next morning. She had suffered intensely during the night. The pain was not localized. Some tenderness was again elicited to the left of the linea alba. No tumor was felt. The administration of calomel was continued, but anodynes were not given for fear they might

mask the symptoms. She was seen again in the evening, and her condition was just about the same. Up to this time there had been neither vomiting nor nausea. The pulse was eighty-six. The bowels had not moved, and she was given a dose of castor oil. This was not retained, and she vomited several times after taking it. The next morning the clinical picture had changed completely. The patient wore an anxious pinched expression. Her pulse now was 140, and her temperature was subnormal. It was decided to get her operated on as quickly as possible.

Please note the absence of nausea and vomiting, except what was considered due to the purgatives administered; the absence of a palpable tumor, or pronounced tenderness, rigidity, distention, or tenesmus and bloody mucus stools up to this late hour of the disease. The pain had been persistently intense until the last day—48 hours after the onset.

At the operation a generalized peritonitis was found, and an intussusception of the ileum lodged in the right half of the pelvis. The affected bowel was bordering upon, if there was not already a gangrenous condition. It had to be resected and an end to end anastomosis was made. The Murphy treatment was instituted, but the patient, after a brief rally, died the next morning.

### A CASE OF BRONCHIAL ASTHMA.

We may see many cases of asthma all having the same characteristics, even though produced by widely different causes. My reasons for reporting this particular case are because of its severity, long standing, and its ultimate cure by a very simple means after repeated failures to even relieve the paroxysms by the usual mentioned remedies.

E. M., aged 31 years; female, single, no occupation; born in United States. Father died at the age of 34 of pulmonary tuberculosis; mother living in good health, but of a highly nervous, irritable temperament.

Had the usual diseases of childhood when quite young, is said to have had measles twice, the last time when 20 years old, since which time has been subject to attacks of bronchitis with asthma, usually in the early winter, sometimes lasting several months. Has never had rheumatism or other diseases often causing this condition. Uses tea and coffee moderately; when well takes more than the average amount of out-door exercise; leading an active social life without dissipation; appetite most always good; bowels regular. Has never had any of the troubles that often reflexly cause asthma.

The patient came under my care in the early part of January, 1906, during a severe paroxysm that had lasted for six hours, and was one of the many attacks that had occurred daily for more than three weeks. Her condition was one of exhaustion, skin pale, cold and bathed in a profuse perspiration; lips, tips of fingers, and nose blue; pupils widely dilated and expression anxious. She was sitting on a chair with her arms on the back of another breathing with the greatest difficulty. A few inhalations of chloroform gave relief, this being a remedy that had not been given a trial. Among the medicines tried without relief were morphia hypodermically; amyl nitrite by inhalation, and several combinations of powder containing stramon-

ium, lobelia, potassium nitrate, etc., these being burned and the smoke inhaled. After a sleep of several hours an examination was made, at which time it was learned that the patient had had a cough with slight expectoration for about three weeks, with almost constant feeling of oppression on the upper part of the chest, severe headache, was nervous and irritable, paroxysms of dyspnoea coming on during the day as well as night; had not been able to lie down more than an hour at a time during three weeks. The physical signs of a moderate bronchitis with asthma were present. The expectorate was in rounded gelatinous masses, composed largely of Curschmann's spirals.

Treatment was started by giving calomel to cleanse the intestinal tract, as the lack of exercise had produced constipation. Water was kept constantly heated in the room in which from time to time oil of eucalyptus was added. The following was given by inhalation:

Rx Olei eucalypti,  
Creositi (Beechwood), of each. . 3j  
Chloroformi .....q. s. ad. 3j  
Misce. Sig.: Inhale frequently.

This was used by dropping a small quantity on cotton and inhaling by placing near the nostrils; almost immediately relief was noticed, the paroxysms becoming less severe, the expectoration free and muco-purulent in character. In one week's time the patient was out and there has not been an attack of asthma since. A few slight attacks of bronchitis during last winter were promptly relieved by going to bed and resorting to the same treatment.—Reported by Herbert J. Smith, M. D., Philadelphia, in the *Monthly Cyclopedic and Medical Bulletin*.

#### A CASE OF PULMONARY EMBOLISM FOLLOWING INJECTION OF SALICYLATE OF MERCURY IN ALBOLINE.

Eugene H. Eising, M. D., of New York.

Adjunct Surgeon, Lebanon Hospital; Assistant Adjunct Surgeon, Mount Sinai Hospital.

Mr. M. is 42 years of age. He had a most marked superficial glossitis, aggravated by intemperate smoking, for which he placed himself under treatment about a year ago. The surface of the tongue was white except for numerous ulcerations and deep furrows, the papillae were smoothed and the edges of the tongue were serrated, corresponding to the spaces between the teeth. The corners of the mouth were covered with persistent ulcerations.

The patient has never had an initial lesion, to the best of his knowledge, nor any later evidences of syphilis; nor has his wife or either of two children ever presented any sign of that disease. In consequence of the foregoing facts I hesitated before subjecting him to anti-syphilitic treatment and attempted various local measures together with materially reducing his smoking.

After several weeks of treatment with no apparent improvement, I thought it wise to try injections of mercury. I used the salicylate in albolene, followed later by iodide of potash.

Almost from the first injection there was improvement. The patient then remained away until two months ago. Upon his return he said that his tongue had been very much better but the trouble had recurred. I therefore had no hesitancy in returning to the injection of mercury.

My injection was made at the usual site in the buttock, and I employed the accustomed technic advocated by Lesser, of disengaging the syringe from the needle before injecting, in order to assure myself that I had not penetrated a blood vessel. After withdrawing the needle some trifling bleeding followed, which, however, stopped almost immediately. Hardly did forty-five seconds elapse when the patient was seized with a sudden paroxysm of severe and uncontrollable coughing. The coughing was incessant, he became much excited, and broke out into profuse perspiration. The coughs were short, there was no expectoration and several times for a moment there was alarming apnea.

After about one-half hour he seemed much better and went home. The following day he sent for me, but I was out of town. The next day, however, I visited him. He told me that the night following his visit to my office he felt well enough to play cards until late, but coughed constantly; that night he knew he had fever and chilly sensations. He remained in bed, coughing incessantly, until I saw him about thirty-six hours after the injection. At this time his cough had abated much, he complained of a sharp sticking pain on the right side of the chest, posteriorly, and over this area was to be heard a shower of fine crepitations. A little codein controlled the cough and two days later he was entirely well except for the crepitations, which continued for some days.

I believe, from the sequence of events, that there is little doubt that the case is one of pulmonary embolism, due to the injection into a venous trunk of salicylate of mercury in albolene.

In 3,835 injections of insoluble salts of mercury in paraffin, Magnus Moller found lung complications to follow forty-three times, or once in every eighty-nine injections. In a second series of cases numbering 2,406, in which Lesser's expedient of disengaging the syringe before injection was employed, not one case of embolism ensued. Hartung showed, as perhaps my case also exemplifies, that Lesser's expedient is not infallible, and that the needle may be in the lumen of a vein, but that the intravascular pressure is not sufficient to force the blood through the needle and make its appearance externally.

It has been recently suggested to me to aspirate, using the loaded syringe for that purpose, just prior to depositing the medicament in the tissues. If the needle is in a vein, with this procedure, blood will freely enter the syringe. If the needle is not in a vein, blood will not be aspirated.

It is of interest to note that pulmonary emboli caused by experimental injection of paraffin or albolene are in the main milder than when these vehicles contain insoluble salts. The insoluble particles more often produce irritation.

A striking feature of pulmonary embolism following therapeutic injection is the mildness of the symptoms.

The symptoms may be classified as follows:



1. Pulmonary—Coughing paroxysms, apnea, pain in chest, bloody sputum, physical signs in chest.

2. General—Chilly sensations, fever, disturbances of taste.

3. Absorption (occurring late)—Anemia, albuminuria, erythema, stomatitis.

It is of further interest to know that this accident is rarely followed by a fatal issue.

## Medico-Legal.

### Damages for Leaving Gauze in the Abdomen.

A judgment of \$4,000 was recently entered against Dr. L. M. Harris of Chicago in the Federal Court in favor of a man of Bowling Green, Ohio. It is said that four years ago the man came to Chicago and entered the Polyclinic Hospital as a charity patient, where Dr. Harris removed one of his kidneys. After the operation was performed the patient was attended by the regular staff of the hospital, and it is claimed that a large piece of gauze was left in the wound. The jury was instructed by Judge Landis to the effect that it made no difference whether or not Dr. Harris personally made the mistake, that he was responsible for anything that happened to the patient, he having been the operating surgeon. A notice of appeal from this judgment has been entered.

### Contracts and Compensation for Services.

The Supreme Court of New York, Appellate Division, First Department, says that the case of *Burke vs. Mulgrew* was an action by a physician against the estate of his father-in-law, in which the physician claimed that he was entitled to compensation for loss sustained through absence from his office in addition to compensation for services rendered. But a contract to pay more than the actual value of the services rendered is quite unusual. Testimony, however, that the services of a particular physician was desired at such place and under such circumstances that compensation for the services would not be adequate remuneration for the loss of time or business, would tend to render probable testimony that an agreement was made to compensate the physician for both services and necessary loss of time or business; but such testimony should not be construed as contemplating compensation for the full time or loss of business and for the services as well, for the former would embrace the later. A construction which would give the physician double compensation should not be given to the contract, unless the language employed was susceptible of no other construction, and in that event the extraordinary character of the promise would render the testimony improbable, and require that it be well supported by facts and circumstances to sustain a recovery thereon.

The court also holds that it was error to exclude evidence designed to show that the family relations were such in this case that the physician and his family frequently visited at the residence of his father-in-law and accepted his hospitality during part of the time for which he charged for his services. This evidence was competent, as tending to show that the calls for

which the physician was charging were materially prolonged by visiting, for which his father-in-law was not properly chargeable, and that there was an overcharge for time.

Evidence with respect to the physician's annual income prior to the date he began rendering the services in question was doubtless proper as tending to show the value of his time, which might be considered by the jury in estimating the compensation to be made for his services and time when absent from the city; but on no theory of the case does the court think evidence admissible of the physician's receipts from his practice during the period of the rendition of these services, showing a falling off in business which might have been due to other causes.

The physician being an incompetent witness on account of the death of the patient, there was difficulty, of course, in showing the services actually rendered while traveling; but on the admissions and declarations made by the patient with respect thereto the physician would be entitled to go to the jury on the claim that he had properly prescribed for and administered to the patient during the periods in question, and to ask the jury to do find.

### Drawing of Line as to What May be Basis for Expert Testimony in Injury Cases.

The Supreme Court of Illinois says that it was claimed in the personal injury case of *Greinke vs. Chicago City Railway Company* that the plaintiff was suffering from paralysis as a result of the injury which she received. She called as a witness a physician who had examined her, on the day before he testified, to qualify himself as an expert witness. He testified, over objection, that at the time of his examination of the plaintiff she was nervous; that there was a twitching and jerking of her hands; that there was a slight drooping of her left leg or left foot as she allowed it to hang over a chair; that the toes of the left foot turned in more than those of her right foot; that the step with the left foot was not as strong as that with the right, "not exactly a dragging but a suspicion of dragging;" that he tested the strength of her hands by taking hold of them with his hands and asking her to squeeze; that he noticed a difference in the strength of her hands; that one thumb was weaker than the other; that the examination was not made for the purpose of treating the plaintiff, but that he might testify as a witness in her case; that he could not say positively whether the jerking and twitching which he observed were voluntary or involuntary; that his impression was that they were involuntary; that the muscles which produced the conditions observed by him were voluntary and under the control of the plaintiff. It is held that in certain respects there was error in admitting this testimony.

The rule is well established in the State of Illinois that the declarations of the injured party, in a case like this, when made as a part of the *res gestae* (essential circumstances of the case) or to a physician during treatment or on an examination prior to and without reference to the bringing of an action to recover damages for the injury complained of, may be introduced in evidence. But the declarations of the injured party made to a physician who has made an examination of such party with a view

to qualifying himself to testify as a witness only are not admissible.

It has also been held that witnesses who are not experts may express their opinions as to the physical conditions of persons whom they have observed; that is, they may state whether, in their opinion, such persons are in good health, have the ability to perform work, whether they are suffering pain, are conscious or unconscious, in possession of their mental faculties, etc.

The rule, however, is well settled that a physician, when called as a witness, who has not treated the injured party, but has examined him solely as a basis on which to found an opinion to be given in a trial to recover damages for the injury sustained by the injured party, cannot testify to the statements made by the injured party to him, or in his presence, during such examination, or base an opinion on the statements of the injured party. An expert witness called under such circumstances must base his opinion on objective, and not subjective, conditions.

## Daily Press and Magazine Items

### Dr. Glatzmayer Convicted of Criminal Operation.

(From Newark Evening News, Dec. 15, 1908.)

Dr. Herman A. Glatzmayer, after he had been sentenced by Judge Ten Eyck, yesterday afternoon, to five years in State prison, and to pay a fine of \$1,000, was released on \$7,500 bail, his counsel filing a writ of error, which acts as a stay and carries the case to the Supreme Court on appeal. The defendant had been under \$2,500 bail, but this amount the court decided was not sufficient under the present circumstances. A joint bond was furnished by George Dalton, Solomon Oury and Glatzmayer.

"I have nothing to say," Dr. Glatzmayer remarked after the imposition of sentences, "except that I hope for a reversal and a new trial, which I think will have a different result. My acts were justified and the jury failed to grasp the case."

In imposing sentence the court reviewed Glatzmayer's trial and conviction for performing an illegal operation which caused the death of Miss Mary E. Vliet, of Blairstown, and then added:

"There can be no doubt that the law designed to prevent this abominable practice is constantly being violated by a certain class of medical practitioners. It is a matter difficult of detection, but occasionally cases like yours come to light through the death of the patient.

"A more flagrant case of violation of this law could not occur. You not only operated, knowing that there was not the slightest legal or moral justification for it, but your conduct both in operating and in the subsequent handling of the case showed a most brutal disregard of your duty as a physician and as a man. You were willing to taken an enormous risk for the sake of earning a \$50 fee. Your chief concern afterward seemed to be not to take all possible means to avoid danger to the life of the patient, but to escape detection.

"After most serious symptoms developed,

which any honest man would know required the immediate removal of the patient to a hospital, where the services of skilful specialists could be employed, you still allowed her to remain in the house to which you had sent her where she had no proper care and you took a chance and waited until she was in a dying condition before you called in a good specialist.

"It is the duty of the court to impose a sentence in this case which will serve as a warning to those who are engaged in this nefarious practice."

The jury that convicted Glatzmayer recommended him to the "extreme mercy" of the court. The maximum penalty that could have been imposed is seven years' imprisonment, or a \$2,000 fine, or both.

### News Editorial.

The sentence of five years' imprisonment and \$1,000 fine imposed upon Dr. Herman A. Glatzmayer, convicted of having performed a criminal operation that resulted in the death of a young woman, is by no means too severe. The maximum penalty provided by law for the crime is five years in State prison and a fine of \$2,000. It is probable that Judge Ten Eyck was influenced in not making the penalty the greatest possible by the recommendation of the jury that mercy be shown to the prisoner.

The severe sentence should serve to deter other physicians from engaging in the same sort of criminal practice. The reputation of this city has suffered considerably in the past two years by reason of operations of this character that have been performed here and have resulted in death. It has very naturally been supposed that these fatal cases have been only a small part of this illegal practice, for, as Judge Ten Eyck said in passing sentence, such misdeeds are not brought to light unless by a death. When they are thus discovered, therefore, it is important for the general welfare that the guilty persons be severely punished. A few more sentences like that imposed in the case of Dr. Glatzmayer will bring to an end any large practice in this city of such illegal operations.

### State Care of Inebriates.

(Editorial in Newark Evening News, Dec. 19, 1908.)

The recommendation of the State Dependency and Crimes Commission for the establishment of an inebriates' home by New Jersey is causing much discussion in the State press, and the majority of the newspapers are protesting against the suggestion on the ground that it would add largely to the State's financial burdens. The News has already suggested that if such an institution is to be created the cost of maintaining it might be assessed upon the manufacturers and dealers in liquors, who profit from the products that make drunkards. This is the method that prevails in the State of Minnesota, which in 1907 adopted a law creating a hospital farm for inebriates. The sections of the act in question providing for funds for the institution read as follows:

"For the building and maintenance of said hospital a tax of two per cent. is hereby levied upon all license fees for the sale of intoxicating liquors under the laws of this State, and whenever a license is granted by any city, village,



county or municipality for the sale of intoxicating liquors two per cent. of the amount charged for such license shall be set aside by such city, village, county or municipality issuing such liquor license for the payment of the tax specified in this section, and shall be immediately remitted by draft to the State treasurer, who shall credit the same to a fund known as the inebriate fund. The costs and expenses of the maintenance of said hospital shall be paid from the inebriate fund, if sufficient, and any deficit shall be paid from the appropriations made by the Legislature of this State.

"If any city, village, county or other municipality shall fail or neglect to comply with the provisions of the last section, the board of control is hereby authorized to recover said taxes in a civil action, brought in the name of said board against such city, village, county or other municipality making default in the payment of said tax."

If the Minnesota plan should be adopted in New Jersey, the amount that would be available for inebriate asylum purposes upon the basis of the existing license fees is easily ascertainable. There are 7,861 places licensed for the sale of liquor in the State. These paid in license fees last year a grand total of \$2,709,410.14. Two per cent. of that amount would be \$54,188.20. Essex County would contribute of that sum \$13,911.53, or somewhat more than one-fourth of the total, and Newark's contribution to Essex's share would be \$12,061.20, a little under a quarter of the whole amount.

Without taking into consideration the initial cost of land, buildings and furniture for such an institution, it may well be calculated that the \$54,188.20 would not maintain a very extensive institution in this State. There are only three of the present State institutions that receive less than that amount from the annual appropriation bill. These three institutions are, as shown by the appropriation bill for the year ending October 31, 1908, the Home for Disabled Soldiers and Sailors and their Wives, at Vineland, which was granted \$24,500 for maintenance and running expenses; the State Home for Girls near Trenton, \$40,500, and the Soldiers' Home at Kearny, \$50,000. Grants to other institutions for the same purpose and for the same period were: Epileptic Village at Skillmans, \$56,800; State Home for Boys at Jamesburg, \$80,500; Home for Feeble Minded at Vineland, \$112,000; State prison at Trenton, \$122,000; State Reformatory at Rahway, \$143,500; State Hospital for the Insane at Trenton, \$166,575, and the Morris Plains Asylum, \$244,825. Taking these facts and figures into consideration, it can be calculated that the proposed inebriate asylum would needs be run on very modest lines if it could be maintained without calling upon the Legislature for more money than would be forthcoming from two per cent. of the license fees.

Of course the Legislature may, in conformity with the recommendation of the State Excise Commission, increase the cost of liquor licenses, and if that should be done there would be a material increase in the two per cent. that might be devoted to inebriate home purposes. Unless, however, there is substantial increase in license fees, it may be taken for granted that the counties and cities that would pay the largest share of the cost of such an institution under the Minnesota plan by the diversion of license moneys would strenuously oppose the innovation for financial reasons.

## The Great White Plague: Its Cost, Cure and Prevention.

(From the Craftsman, February, 1909.)

We were pleased to find in the February, 1909, issue of *The Craftsman*, published in New York City, an excellent article on the above subject, contributed by Charles Harcourt, Esq. Such articles are worthy of careful perusal and are calculated to do a vast amount of good in the carrying out of the highly important educational feature of the anti-tuberculosis campaign. We give a few extracts from this article.—Editor.

"The immigrants to our country, of whom the port of New York receives one million or more a year, furnish a large proportion of our consumptives. But, contrary to the general belief, they are exceptionally healthy on arrival. The majority of them have been accustomed to outdoor living and an environment entirely different from that in which they settle down. Commissioner of Immigration Watchorn has said:

I do not hesitate to express the opinion that the stream of immigration pouring into this country is so nearly absolutely unattended by this dread disease as to render it a mighty important factor in securing social conditions favorable to individual immunity." In other words, if we should give these people ordinary facilities for keeping healthy, instead of permitting them to become rapidly diseased, they would be as potent an element for good as they are for evil in this matter. When New York's laboring population is universally provided with light and airy homes and workshops, the greatest step toward the eradication of tuberculosis from the community will have been taken. By precisely such measures the city of Liverpool has effected a marked decline in the disease among its inhabitants in recent years. The new tenement-house law of New York, for the passage of which the Charity Organization Society is largely responsible, is an important movement in the same direction.

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No matter what the cost of eradication and prevention, it must be an economical measure, to say nothing of its human aspect. Consumption is a wasting disease. The victim's vitality is gradually sapped and his utility is usually impaired or destroyed years before death releases him. Thus, the loss to individuals, their families and the communities to which they belong is in the aggregate enormous. The total cost to the United States, according to Professor Irving Fisher, exceeds one billion one hundred millions of dollars per annum. Of this amount about two-fifths, or four hundred and forty millions of dollars, falls on other than the consumptive.

To eliminate the material waste and the suffering entailed by tuberculosis, any amount of public expenditure would be justified. Nor would the outlay necessary for the enforcement of all desirable preventive and curative measures be as great as might be supposed. The State of New York has in recent years committed itself to the expenditure of ten millions of dollars a year on roads and one hundred millions on the deepening of the Erie Canal. Neither of these projects will compare for a moment in beneficial results with the eradication of tuberculosis from the State, which could be effected at a much less cost.

Philanthropists and charitable organizations are generously supporting the crusade, but the work is far beyond the power of such agencies to accomplish. Every State and municipality in the country should, and ultimately must, make provision for the proper care of its indigent consumptives. The great majority of the afflicted belong to the wage-earning class with small means. A large percentage of these develop the disease and die unnecessarily because their limited means will not secure for them protection and relief.

Many medical authorities maintain that from seventy-five to ninety per cent. of the persons who contract tuberculosis might be restored to health if they could be subjected to the proper treatment before reaching the third and final stage of development. It would be less expensive to the community to save these lives than to allow them to be sacrificed."

### Untrained Nurses.

(From the Philadelphia Bulletin.)

Obliterate yourself. Obey the physician unquestionably. Don't talk about the patient's condition in her hearing. Never give medicines without the advice of the doctor. Do not talk to the patient, nor to any one else of what she talks about in a delirium. Move around the room in a light, gentle way, letting your very step bespeak the cheer of your heart.

Show your confidence in the swift recovery of your patient. Act as if it were a pleasure to do the task before you.

If you have not naturally a low, firm, pleasant voice, cultivate one. It can be done. Recoveries have been retarded by a hoarse, rasping voice of a shrill high one that grated on the nerves of the patient.

Don't fuss and fidget about the room. Calmness, an air of knowing what you are about to do, will inspire confidence and respect in the patient. If you are inclined to be fidgety provide yourself with sewing or embroidery, and sit quietly. Don't talk to the patient unless her recovery is so far progressed that you are expected to entertain her. Don't seem to be in a hurry at anything. Nothing so composes the patient as a composed nurse.

Never trust to your eye in giving medicine. Always measure accurately with a dropper or marked glass. Never give anything, inwardly or outwardly without carefully reading the label twice. Fatal mistakes have been made by nurses who "thought" they knew.

Don't arrange your hair, work over your nails, or fuss over any part of your toilet in the presence of the patient. Don't wear squeaky shoes, or clothing that rustles or rattles. Rubber heels are necessary in a sick room. A pair of white canvas shoes, such as were worn in the summer, are nice for this purpose.

Never sit down on the bed, nor lean upon it. An inexperienced nurse will do this without dreaming of the extent to which it irritates the patient. Have a chair handy, or stoop over. Do not touch with your hands anything the patient is to put in her mouth. In offering her a pill, place it first upon a teaspoon.

Don't taste the food as you offer it to her. Don't bring more than she can eat. And never let it stand around in the hope that she may eat

it later. Every vestige of the meal must be removed as soon as the patient has finished.

Whispering must not be permitted in the sick room. Have all talking done in low, distinct tones. And do not permit the members of the family to come in and murmur together in such manner that the patient is made curious yet cannot hear what they say. Don't allow rapping at the door. Have a code of signals, or leave the door ajar.

Husband your strength. Make every step count. When it comes time for your exercise, outing or rest—for all of these you must have—make the most of every moment so that you can go back to the sick room refreshed and cheerful.

Much of the above may sound like platitudes, but it is perfectly true that many home nurses whose conscientiousness would not permit any great oversight, may yet with the best intention in the world be guilty of many of these annoyances which set the nerves of a sensitive patient on edge. It seems hardly needful to add that everything presented to a sick person must be served on the daintiest china and silver available.

## Reports from County Societies.

### ATLANTIC COUNTY.

Theodore Senseman, M. D., Reporter.

The regular annual meeting of the Atlantic County Medical Society was held Friday, January 8th, at the Hotel Rudolf.

The following officers were elected to serve for the ensuing year: President, Dr. C. M. Fish; vice-president, Dr. T. G. Dunlap; secretary and treasurer, Dr. W. P. Davis; reporter, Dr. Theodore Senseman; annual delegates to the State Society, Dr. A. E. Ewen, Dr. E. S. Sharpe.

After the election and regular routine business the society adjourned to the banquet hall of the hotel to partake of the regular annual dinner.

### MIDDLESEX COUNTY.

Benjamin Gutmann, M. D., Secretary.

The regular quarterly meeting of the Middlesex County Medical Society was held January 20, 1909, at 2 o'clock P. M., at the residence of Ambrose Treganowan, M. D. (Mayor), South Amboy. There was a fair attendance. Dr. F. E. Riva, of New Brunswick, the president, occupied the chair.

Dr. William T. Davis, of Perth Amboy, and Dr. Eugene E. Eulner, of South Amboy, were elected members. Dr. James Collins, of Carteret, was proposed for membership and was referred, under the rules, to the Committee on Ethics, for action at the next meeting in New Brunswick, April 21st.

The question of the adoption of the scheme of medical defence of members now pending in the State society and which was referred to the county societies for consideration and expression of judgment, was, on motion, taken up for discussion. Dr. D. C. English spoke in explanation of the scheme and presented briefly also the outlines of the Illinois and Kentucky plans and the satisfactory results met with under their methods of procedure. Dr. A. Trega-



nowan spoke in favor of the principle of medical defence and, after further brief discussion by the members present—the general consensus of opinion being favorable to its adoption—action was, on, motion, postponed until the next meeting in anticipation of a fuller meeting, as it would be the annual meeting.

Dr. A. Clark Hunt, of the State Board of Health, gave a very interesting account of the recent epidemic of diphtheria at the Village of Epileptics, at Skillman, and explained the method of dealing with it. This was followed by a general discussion of contagious diseases, with particular reference to modes of transmission.

The meeting then adjourned and the members were invited to the dining-room, where the doctor and his good wife had provided an excellent and bountiful dinner, which was greatly enjoyed and called forth a hearty vote of thanks.

## Local Medical Societies

### ORANGE MOUNTAIN MEDICAL SOCIETY'S TWENTY-FIFTH ANNIVERSARY.

Twenty-five years of successful history were reviewed at the silver anniversary of the Orange Mountain Medical Society, which was celebrated December 18th, at a dinner served at the Essex County Country Club, West Orange. Attending the banquet were many of the charter members who had attended the first meeting held at the residence of the late Dr. Pierson, 14 Hillyer street, Orange. Attention was called by the speakers who responded to the toasts to the fact that the society had been largely instrumental in establishing the most amicable relations between all the physicians of the community.

Dr. Harry E. Matthews, president of the society, acted as toastmaster, and those who responded to toasts were Dr. Thomas W. Harvey, of Orange; Dr. Stephen Pierson, of Morristown; Archdeacon Lewis Cameron, of South Orange; Robert E. Annin, of South Orange, and McCready Sykes, of South Orange. Music also proved an enjoyable feature of the anniversary celebration, the popular Doctors' Quartet being obliged to respond to many encores. Others who participated in the musical program were Andrew Smith, of South Orange, and J. H. King, of East Orange. The members of the Doctors' Quartet are Dr. Charles W. Banks, Dr. Arthur W. Bingham and Dr. George Crocket Becket, of East Orange, and Dr. Richard D. Freeman, of South Orange.

Dr. Harvey responded to the toast "Our Silver Wedding," and gave an interesting review of the history of the society. He recalled the initial meeting held on December 14, 1883, at the residence of the late Dr. Pierson. Twenty-two physicians attended that meeting and of this number twelve are dead. At the second meeting, which was held on January 4, 1884, a constitution was adopted and officers elected. Since then the society has met once a month, each meeting being devoted to the reading of a paper, and the discussion of the topic therein considered. Careful record has been kept by the secretaries of all the papers read, and a re-

view of the subjects discussed during the past quarter of a century, demonstrates that the society has taken a broad as well as a keen interest in every branch of the medical profession.

Chief among the important incidents of the society was the organization of the William Pierson Medical Library Association a few years ago. The Orange Mountain Medical Society was the first organization in Essex County to start a movement looking to a medical library, and this movement was pushed until the library was established by the association.

In responding to the toast, "A Quarter Century of Jersey Medicine," Dr. Pierson paid repeated tribute to the Orange society. He declared that the physicians of Morristown and other communities had been encouraged to organize, after the medical men of the Oranges had demonstrated that the profession could be vastly benefited by the affiliation of its members.

The other toasts of the evening were as follows: "Jersey Lightning," Archdeacon Cameron; "The Law and the Profits," Mr. Annin; "Medicine," Mr. Sykes. All three speakers indulged in many laughable stories, most of which were at the expense of the physicians.

### NEWARK MEDICAL LEAGUE.

The Newark Medical League held its annual meeting on Monday evening, December 28th, at the Continental Hotel, Newark. The following officers were elected for the ensuing year: President, Dr. Herbert W. Long; vice-president, Dr. Nathaniel G. Price; treasurer, Dr. Edwin Steiner; recording and corresponding secretary, Dr. Philip G. Hood; financial secretary, Dr. Louis Weiss; reporter, Dr. Julius Levy.

The council during the coming year will be composed of the above named officers, and Drs. David A. Kraker, Theodore Teimer, Arnim Fischer, Victor Parsonette, Louis L. Davidson and Emanuel Yackowsky.

The meeting then adjourned and the members gathered in the dining-room, where a banquet was served. At its conclusion, ex-President D. A. Kraker, as toastmaster, made the first speech, in which he gave an account of the growth of the league during his two terms of office; Dr. Louis Weiss gave the history of the league; Dr. Julius Levy spoke on "The Feeding of Infants;" Dr. Theodore Teimer read a paper on "The Future of the Newark Medical League;" Dr. N. G. Price read a humorous article on "The Automobile." Remarks were also made by Drs. H. W. Long, C. C. Beling, E. Steiner, V. Parsonette, E. Yackowsky and Frank Devlin.

Other members present were Drs. C. J. Hailperin, B. E. Kopplau, C. Lippe, S. Hirschberg, A. Finkelstein, H. S. Smith, M. Jedel, B. H. Woolf, I. Kupperman, H. B. Kessler, A. J. Mitchell, I. J. Rachlin, P. G. Hood, W. E. Hitchcock, L. S. Blumberg, T. E. Bleick and William Buermann.

Louis Weiss, Secretary.

### MEDICAL LIBRARY ASSOCIATION.

The William Pierson Medical Library Association of Orange, with their usual enterprise in providing excellent lectures for members and others, announced for this winter's season a course on Pediatrics. Dr. L. E. Le Fetra gave

the first lecture, December 8th, on "Disturbances of the New Born," as congenital heart, nervous, intestinal and constitutional ailments. Dr. Henry Dwight Chapin gave the second January 12th, on "Feeding and Difficult Children During the First Year." The attendance has been good and the lectures excellent. The next speaker will be Dr. Walter Lester Carr, February 9th, on "Gastro-Intestinal Diseases of Children." F. W. P.

### MEDICAL LIBRARY ASSOCIATION OF NEWARK, N. J.

**Frank Wilcox Pinneo, M. D., Secretary.**

The third annual meeting of this energetic society was held December 1st, 1908, at the Public Library building in Newark. Reports for the past year were read, showing a maintained membership, a fine increase in books installed—all newest editions of the most helpful and practical works—a very generous and well-selected list of current periodicals, and, finally, a steady growth in the use of the library by the members. The officers for 1909 are as follows: President, Dr. Wells P. Eagleton; vice-president, Dr. H. J. F. Wallhauser; secretary and treasurer, Dr. F. W. Pinneo; directors, Dr. H. L. Coit, Dr. W. S. Disbrow, Dr. W. R. Ward, Dr. E. S. Sherman; librarian, Mr. John Cotton Dana.

### Newark Board of Health.

Mavor Haussling has appointed the following: Dr. Herman C. H. Herold, Dr. James T. Wrightson, Dr. George L. Warren, Henry C. Vance, John W. Dobbins, Timothy E. Foyle, reappointed; Dr. Theodore W. Corwin, Dr. Frank B. Meeker, Charles W. Baker and James A. Rowe, to succeed Dr. William S. Disbrow. Dr. George R. Kent, Frank M. Schulz and I. Rolfe Denman. Messrs. Herold, Vance, Corwin, Warren and Baker are Republicans, and the other five members are Democrats. No salary is attached to the office.

## Medical Miscellany.

### Medical Literature.

(From a communication in the *Newark Evening News*, December 17, we extract the following, signed F. W. P., M. D.—Editor.)

As Dr. Black said, "Medicine is one of the most progressive branches of knowledge," and it might be added the medical profession is incessantly working to bring the advantages of this progress to bear on human life and health. When it is considered how many branches of science, from physics, chemistry and biology up to pathology and therapeutics, contribute to medicine, one gets a hint of the mass of material available for study.

How shall this be presented to busy practitioners so as to be of practical value and accessible? The *Index Medicus* (with the *Bibliographia Medica*, for four years while the former suspended publication) and the *Index Catalogue* of the surgeon-general's library furnish a key for finding anything in the whole realm of medi-

cal literature, and supplying these is the first service a library renders to its constituency. A further development of such facilities will be, when funds become adequate, a cumulative card index by subject and author, of original work as fast as it is published, so that our members will have instantly available at all times a detailed cross reference to the literature right up to date.

This is an indication of the aims cherished by the Medical Library Association for Essex County. It does not mean a mere accumulation of musty books and journals never used. It includes more than a library of books, journals and monographs only laid on shelves. It makes workable and accessible and up to date a vast fund of medical knowledge which a physician, however busy and however resourceful in his own library, is sure to find an added aid, and what aids him is destined to help the community.

### Newspaper Publishes Retraction.

The suit brought by Dr. S. Adolphus Knopf, New York City, against the *Philadelphia North American*, which on May 7, 1907, misquoted an address delivered by Dr. Knopf, in which he was erroneously credited with saying that when a patient is dying of tuberculosis the physician should administer morphin in large doses so "that he may go painlessly and quickly," has been settled satisfactorily by a compromise, and in the *North American*, November 29, a retraction was published; and Dr. Knopf's statement, which had been misquoted, was correctly made as follows: "When we are in the presence of a dying consumptive, who is suffering, I believe it is our sacred duty to give him morphin to relieve his pains and make him comfortable, and let him die easy." It is understood that substantial damages have been paid Dr. Knopf, as well as reimbursement for his expenses in the suit, which has now been dropped, and also that the sum received for damages has been turned over by Dr. Knopf to the National Association for the Study and Prevention of Tuberculosis, to be used for the benefit of the consumptive poor, under the direction of the directors of the association. Dr. Knopf's friends are congratulating him on having pushed the suit to this satisfactory settlement, especially in view of the fact that the result indicates that physicians who are grossly misquoted, maliciously or otherwise, in the public press, may look for satisfaction in view of the injury thereby inflicted.

### State Control of Public Water Supplies.

Dr. C. O. Probst, of Columbus, Ohio., at the annual meeting of the American Public Health Association, said that if a polluted public water supply concerned only the community that used it there might be some argument in favor of home rule, although in this case it would be more properly home misrule. The State had become in a large measure one community, and it must assume increased responsibility for the conditions which threatened the lives and health of the people. It should be the duty of the State to protect from pollution, as far as possible, all sources of water supplies of which use was being made. The question coming up in all populous States was, Could the streams and watersheds that must furnish public water sup-



plies be kept free from contamination by laws and inspection? This might be possible for some of the States, but not for the great Middle West territory, where usually municipal and industrial wastes must go to the streams. Should these wastes be purified in all cases where the stream was used in any part of its course as a public water supply, or should water purification be depended on for protection? We could not settle this problem for all communities in general terms, for the very evident reason that each community afforded a problem of its own. The State should decide what could best settle such questions.—*Medical Record*.

### Health of Canal Zone.

Health of Canal Zone.—During November, 1908, the death rate in the Canal Zone was 23.71, as compared to 28.86 in November, 1907. Among employees alone the decrease was 9.16 per thousand, the total number of deaths being forty, thirty-one of which were from natural causes and nine from violence. The number of cases of malaria admitted to the hospitals during November was considerably less than in October. There has been no case of yellow fever since May, 1906, and no bubonic plague since August, 1905, though both of those diseases have existed on the Atlantic and Pacific coasts within three days' sail.

### Lighting and Shading School Rooms.

Report of a committee of the Buffalo Academy of Medicine; published in the *Buffalo Medical Journal*, September, 1908. The conclusions are: 1. That windows at the end of a room, if they face the teacher or pupil, should be shaded if sufficient light can be obtained from the side. 2. Left-handed pupils should face in the direction opposite to that of the right-handed. 3. All shades should be adjustable, admitting light both above and below; the color dark yellow to light green and so arranged as to distribute the light as evenly as possible through the room. 4. Ceilings should be tinted a light yellow; side walls a medium green and without luster.

### Woman Doctor a Mayor.

For the first time in its municipal history, Great Britain has a woman Mayor in the person of Mrs. Garret Anderson, M. D., recently elected Mayor of Aldeburgh. Mrs. Anderson is the pioneer woman physician of England, having received her degree in Paris in 1870, after the English Medical College had refused to admit her. Her fight to enter the medical profession was used by Charles Reade as a part of the theme of his novel "The Woman Hater." After the establishment of the London School of Medicine for Women, Mrs. Anderson served as its dean from 1876 to 1898, and in 1896 was elected president of the East Anglian branch of the British Medical Association. She was senior physician to the Euston road Hospital for Women from 1866 to 1890, having received a license to practise five years before she passed her final examinations. She is an ardent woman suffragist.

### New Medical Bill Before the Pennsylvania Legislature.

(From the North American, Jan. 27, 1909.)

At the meeting of the Medico-Legal Society, held last night in the Columbia Clubhouse, at Broad and Oxford streets, a start in the campaign for more efficient medical laws in Pennsylvania was made by prominent physicians from all parts of the state.

The features of the new medical bill which will be presented before the Legislature on Thursday by Senator E. M. Herbst, of Berks County, were explained most fully from a legal standpoint by Select Councilman John P. Connolly and Dr. L. Webster Fox, chairman of the Philadelphia County Medical Society's committee on legislation, from a physician's point of view, and other speakers.

The principal points of the new bill will be the change from three examining medical boards to one, all the members of which are to be appointed by the Governor. Each member must be a physician in good standing, who has practiced medicine for at least ten years.

Homeopaths and all other "paths" are protected by the provisions that no applicant shall be refused a license solely because his answers to the questions asked are based upon a medical sectarian teaching, and the definition of the practice of medicine as one who is able to diagnose, treat or prescribe for any human disease whether with or without the use of drugs.

In order to protect the public from men who have been guilty of malpractice, or who are physically or mentally incapable of attending a patient, the board is invested with the power to revoke the licenses of such, and to prevent a man with an impaired intellect from taking the examination for licensure to practice medicine.

Dr. A. R. Craig, a member of the state council, and Dr. J. B. Walker, of the state examining board, each explained the great necessity of better medical laws to protect both the public and the physician, and the scope with which this proposed act would have.

### International Tuberculosis Exhibit.

The International Tuberculosis Exhibit, which had been opened to the public daily at the American Museum of Natural History, New York City, since November 30, 1908, closed January 17th at 10 o'clock p. m., after having been visited during the seven weeks by 753,301 persons. The exhibit almost in its entirety will soon be taken to Philadelphia, and opened to visitors under the direction of the Department of Health of that city.

### Tour in the International Medical Congress.

Tour to the International Medical Congress.—A Cook tour to the International Medical Congress, Budapest, next August, is being arranged by Dr. Charles Wood Fassett, St. Joseph, Mo., from whom full information may be obtained on application.

When a patient complains of pain in the eye with epiphora, don't always think it is due to conjunctivitis. The cause may be a beginning glaucoma.—*American Journal of Surgery*.

# THE JOURNAL

OF THE

## Medical Society of New Jersey

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 FEBRUARY, 1909
 

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

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### MEDICAL LIBRARIES.

We are glad to see the movement for the establishing of medical libraries in connection with county and local medical societies growing. In these days of advancement in the science and art of medicine, every doctor should desire, and strive, to keep abreast of the times, by keeping himself informed of the increasing knowledge and practical application of it. A large number of physicians in general practice have not the means to buy even the really valuable books that are published, or to subscribe for a few good medical journals. The fees they receive are so small and the vast amount of so-called charity work—professional service given to those who are able and ought to pay for it, is robbing them of work and fees which they need and ought to have.

A medical library established in our larger cities by members of the profession paying, say \$5 per year, for the purchase of important new books and leading foreign and domestic medical journals, to which physicians should have access, under certain liberal conditions, would be a most excellent thing for both physicians and patients. Where there is a public library, doubtless in most cases space could be secured for such books and periodicals and arrangements might be made whereby the physicians of the city, and of the county, might have access to them. Where

there is no public library, it has been suggested that space could probably be secured in the county court house. Where it could be done without being financially burdensome to any, we believe the ideal plan would be for the local or county society to have their own room or, better, building, in which the library shall be placed, and in large cities where laboratory work and experimental research can be conducted. Arrangements might be made under properly drawn regulations for the circulation of the books and journals. This would be a feature specially helpful to members of the county society residing in the country districts.

We offer these suggestions for the consideration of our county and local societies, believing that their adoption would deepen the interest in the societies, increase the proficiency of the physician's work, and so benefit our profession and our patients. We will be glad to receive suggestions as to the practicability of the movement and how to make it most successful. We have heard of one prominent physician who has intimated his intention to bequeath his large and valuable library to his county society. This is a most commendable thing to do. It is also an excellent example to follow, and such libraries should be well cared for, made of practical use and be constantly increased by the addition of valuable new works.

### MEDICAL FEES.

In another column of this issue will be found an editorial taken from the Maryland Medical Journal on "The Doctor's Fee." While agreeing with some of the ideas expressed, we believe that this whole question, which has been occupying so prominent a place in the discussions in medical journals, needs very deliberate and careful consideration, and should be settled in a manner worthy of the profession that has maintained high ethical principles, that has been remarkably free from the spirit of commercialism and, beyond all other professions and classes, has been lavish in



the bestowal of charity in professional service. That there is imperative need of consideration and adjustment of medical fees is apparent, when we are assured by conservative men that the average income of the country doctor is about \$800 per year and of the city practitioner about \$1,200, and that many are not able to adequately support themselves and their families.

We do not believe that the general practitioners should seek to have their fees adjusted to rates commensurate with those of the specialists—that is not a proper basis—but that they should receive adequate compensation for time, skill and services rendered; that experience should count as well as the fact that, unlike members of other professions, they must expend much time and money to keep up with the rapid advance of medical science. We are suffering from the mistakes of past generations of medical men in their methods of placing valuation on their services, and it is difficult to change basis in deciding proper value that shall be satisfactory to physician and patient alike, e. g., the per visit method of fixing fees is not right in principle and does not obtain in other professions. The fee should be largely dependent upon the gravity of the case in hand, the skill required, the attending anxiety and the time expended, and we believe it is perfectly proper to consider the financial ability of the party seeking our services. The lawyer certainly has no conscientious scruples in adopting that course, especially when dealing with wealthy corporations. But alas! these corporations seem to even things up by driving sharp bargains with the doctor for far less than the lowest of regular fees. The greatest pity and shame is that some doctors are willing—aye, begging for the privilege—to be thus dishonored, and, worse still, willing to injure and dishonor their brother practitioners. There are other points to be considered which we will not now discuss, but we will be glad to hear from our members on this subject.

We are accustomed to hear much about the exorbitant charges of the specialists—doubtless in a few cases they are unduly large, but as a rule we believe these men are conscientious, that they consider rightly the value of the service to the patient and his ability to pay. Most of them do an immense amount of work with little, sometimes with no, compensation, and often in the latter case they are defrauded by patients who are abundantly able to pay but pose as charity patients. Let us remember, before criticising too freely the specialists, two facts: 1. The large fees of the specialists have largely been the means of calling attention to this subject of the inadequate fees of the general practitioner, which has led to earnest effort to secure for them the compensation which is rightfully due them. 2. The consideration of the still larger fees which the lawyer often demands—\$500, \$1,000 or \$5,000—as a retaining fee with large amounts following for service; or the architect, several of whom in our large cities are said to have an income of \$100,000 or more a year; one is said to have received \$300,000 for designing and supervising the construction of one large building. Contrast the services and responsibilities of these with those of the physicians—saving human life, possibly preserving the health or saving the life of the lawyer or architect and thus enabling him to make his hundreds of thousands. Then compare the record of progress of the medical and legal professions and what that means of close study and application to acquire proficiency in practice. With the medical profession it is a record of advance all along the line. What about the legal profession? We do not wish to be unfair; we will let a prominent Western lawyer speak, though his words are stronger than we would dare to utter and seem exaggerated, though they were endorsed by other lawyers: "So far from being an exact science or a progressive study, there has actually been no improvement in the law or the practice in the last 5,000 years, I maintain," "there is not

a law in our code of legal procedure today that was not in vogue in the city of Ninevah 5,000 years ago, and which was not used in Athens 420 years before Christ."

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One of the most important questions that has been raised during the discussion of medical fees is that of the practice of dichotomy—the term used by the French for the division of fees between the specialist and the family physician. We believe there are decided objections to this when the plan is for the specialist to pay the family physician. It raises the question as to the proportion the latter shall receive—and it would naturally vary according to the circumstances of the case—and it offers the temptation to select the specialist who will give the largest rebate rather than the one of greatest skill and efficiency. We believe the family physician should be paid a liberal fee, as well as the specialist, BY THE PATIENT. In his desire for the patient's highest welfare—possibly to save his life—he has advised the employment of the specialist, he shares the responsibility, usually the after-care of the patient, and the gravity of the case justifies his liberal compensation. A medical society in the suburbs of Paris has declared in favor of proportionate division and approved the following: That in consultation the family physician should receive one-fourth, and in operation one-third, of the honorarium after deducting the necessary fees to surgical assistants.

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### ABRAHAM LINCOLN.

With all other classes of our citizens, the members of the medical profession unite in doing honor to the memory of Abraham Lincoln—the ideal citizen, patriot statesman and president—on the one hundredth anniversary of his birthday. He was probably the best specimen of American development and character under American principles, institutions and policies. His case was also one of the best illustrations of our country's recogni-

tion of ABILITY and WORTH without regard to lineage or affluence and powerful backing. As was said by a writer, "he was his own ancestors." He was born and reared in comparative poverty, but by application and indomitable perseverance, determination and courage, he triumphed over conditioning environment, developing an ideal manhood of force and strength combined with gentleness and righteousness. He was finally nominated for President and elected over men who had powerful backing and also world-wide reputation because of transcendent ability and long and faithful service. He was a man of the people and when the people choose the man they generally choose wisely, certainly they showed great wisdom in the choice of Lincoln.

As medical men we have reason to remember his interest in and appreciation of the excellent work done by the medical men in the service of the country during the Civil War. To his suggestion and approval is due in no small measure the unparalleled liberality of our government, which provided so amply for the care of the sick and wounded soldiers. We forbear further comment, preferring, on another page, to let his words and a few facts speak.

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### DR. WILLIAM T. BULL.

The members of our profession have followed with the deepest interest the progress of the magnificent fight for life that Dr. Bull has made against disease that we have been accustomed to look upon as an enemy unconquerable. He has shown a courage and heroism worthy of the highest admiration and commendation, and we cannot help expressing the wish that he might win in spite of the tremendous opposing forces, and that his life might be spared for years to continue his splendid record as a surgeon.

We regret the false reports that have been given in the press concerning his case, and believe that Drs. Delafield, Blake and Potter are to be commended for the



statement they issued January 27th to the public giving the facts as follows:

Owing to the continued erroneous and misleading reports concerning Dr. Bull in certain newspaper articles, and to the fact that these reports are arousing false hopes in the minds of many sufferers from cancer throughout the country, it seems wise to say that Dr. Bull's general condition and the rheumatic complications have improved sufficiently to warrant his departure for the warmer climate of Savannah in the near future. The original growth, which was the real cause of his illness, has never been cured.

We know that we express the sentiments of the members of the profession in New Jersey in extending sympathy to the doctor, and to his wife who has so faithfully ministered to him, with our hopes for best possible results from their sojourn in the South.

We acknowledge with thanks the receipt of a paper read before the Camden County Society by Dr. D. Benjamin, entitled "Can the Nation Be Perpetuated?" and one from Dr. D. E. English, of Millburn, on "The Medical Profession and the Societies." These are timely papers, worthy of careful reading. We shall endeavor to give them insertion in our March issue, with Surgeon-General Rixey's and Dr. J. W. Martindale's papers; possibly one or two others.

The editor, in expressing his thanks to Drs. D. E. English, F. W. Pinneo and M. J. Synnott, for communications conveying special information for the Journal, would express also his deep regret that it has been impossible to acknowledge, by letter, these and other similar favors received. The amount of his correspondence is very great and, in connection with other editorial work—the last three or four months under special stress—requires an amount of time far greater than is generally supposed. We may be pardoned for adding that if some of our friends will save us the time spent in writing for information that—for our Society's and its Journal's sake—ought to come unsolicited and in LEGIBLE and ACCURATE form, it will be our great pleasure to largely increase our personal correspondence. Several county and local medical societies held meetings before the twentieth of January; our columns will show how many reports of those meetings

were received up to the 25th, when our last matter went to the printer. Is it too much to ask that such reports shall be sent within twenty-four hours after the meeting, clearly written or, better, typewritten, with NAMES IN FULL?

## HEROIC BENEFACTOR OF HIS COUNTRY AND MANKIND.

(From the *Maryland Medical Journal*.)

James Carroll, M. D., LL.D., who died in September, 1907, was the first of a number of scientific physicians to submit himself to the bite of the yellow fever mosquito in that noble series of medical experiments which has brought to the world rescue from one of its deadliest plagues.

The following description of his inoculation by an infected mosquito July 27, 1900, is in Dr. Carroll's own words:

The insect, which had been hatched and reared in the laboratory, had been caused to feed upon four cases of yellow fever, two of them severe and two mild. The first patient, a severe case, was bitten 12 days before; the second, third and fourth patients had been bitten six, four and two days previously, and their attacks were in character mild, severe and mild, respectively. In writing to Dr. Reed on the night after the incident I remarked jokingly that if there were anything in the mosquito theory I should have a good dose, and so it happened. After having slight premonitory symptoms for two days, I was taken sick on August 31, and on September 1 I was carried to the yellow-fever camp. My life was in the balance for three days, and my chart shows on the fifth, sixth and seventh days my urine contained eight-tenths and nine-tenths of moist albumen. The tests were made by Dr. Lazear. I mention this particularly because the results obtained in this case do not agree with the twentieth conclusion of Marchoux, Salimbeni and Simond, that the longer the interval that elapses after infection of the mosquito the more dangerous he becomes. Twelve days, the period above cited, is the shortest time in which the mosquito has been proved to be capable of conveying the infection. It is my opinion that the susceptibility of the individual bitten is a much more potent factor in determining the severity of the attack than the duration of the infection in the mosquito or the number of mosquitoes applied. On the day that I was taken sick, August 31, 1900, Dr. Lazear applied the same mosquito with three others to another individual, who suffered a comparatively mild attack, and was well before I left my bed. Thus it happened that I was the first person to whom the mosquito was proved to convey the disease. On the 18th day of September, five days after I was permitted to leave my bed, Dr. Lazear was stricken, and died in convulsions just one week later, after several days of delirium, with black vomit. Such is yellow fever.

Frequent applications of tincture of iodine on a "tooth-pick" swab will often heal a corneal ulcer where other means fail.—*American Journal of Surgery*.

## 1809—FEBRUARY 12—1909.

## ABRAHAM LINCOLN.



"HE IS THE MAN OF THE AGES."

—E. M. Stanton.

"THE FIRST AMERICAN."

—J. Russell Lowell.

"Abe never gave me a cross word or look. He is the best boy I ever saw or ever expect to see."  
—Lincoln's stepmother.

"Boys let's get away from this. If I ever get a chance to hit that thing, I'll hit it hard!"—Lincoln at a Slave Market in 1831.

He got the chance; he *did hit it hard*, in the EMANCIPATION PROCLAMATION, freeing four millions of slaves.

Extracts from an address by Lincoln, Feb. 22, 1842:

"Turn now to the temperance revolution. In it we shall find a stronger bondage broken, a vile slavery unumitted, a greater tyrant deposed; in it more of want supplied, more diseases healed, more sorrow assuaged. By it no orphans starving, no widows weeping. \* \* \* And when the victory shall be complete, when there shall neither be a slave nor a drunkard on the earth—how proud the title of that land which may truly claim to be the birthplace and the cradle of both those revolutions that shall have ended in that victory!"

"Washington is the mightiest name on earth—long since mightiest in the cause of civil liberty, still mightiest in moral reformation. On that name no eulogy is expected. It cannot be. To add brightness to the sun or glory to the name of Washington is alike impossible. Let none attempt it. In solemn awe pronounce the name, and in its naked, deathless splendor, leave it shining on."

Having been elected president, Mr. Lincoln left his home, Springfield, Ill., on February 11, 1861, and in his farewell speech at the station, he said:

"A duty devolves upon me which is, perhaps; greater than that which has devolved upon any other man since the days of Washington. He would never have succeeded except for the aid of Divine Providence, upon which he at all times relied. I feel that I cannot succeed without the same Divine aid which sustained him, and in the same Almighty Being I place my reliance for support; and I hope you, my friends, will pray that I may receive that Divine assistance without which I cannot succeed, but with which success is certain."

From prairie cabin up to Capitol,  
One fair ideal led our chieftain on.  
For evermore he burned to do his deed  
With the fine stroke and gesture of a king.  
He built the rail pile as he built the State,  
Pouring his splendid strength through every blow,  
The conscience of him testing every stroke,  
To make his deed the measure of a man.

—From Edwin Markham's poem, McClure's Magazine

From his First Inaugural, March 4, 1861:

"I am loth to close. We are not enemies but friends. We must not be enemies. Though passion may have strained, it must not break our bonds of affection. The mystic chords of memory, stretching from every battlefield and patriot grave to every living heart and hearthstone all over this broad land, will yet swell the chorus of the Union when again touched, as surely they will be, by the better angels of our nature."

From the Second Inaugural, March 4, 1865:

"With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds; to care for him who shall have borne the battle, and for his widow and his orphans—to do all which may achieve and cherish a just and lasting peace among ourselves, and with all nations."

From his Gettysburg Address.

"The world will little note, nor long remember, what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall have a new birth of freedom—and that government of the people, by the people, for the people, shall not perish from the earth."

(Some of the above items are taken from the Lincoln Story-Calendar, from The Biddle Press, Philadelphia. It is an excellent Lincoln Memorial Calendar.—EDITOR.)



## Editorials from Medical Journals

### THE EMMANUEL MOVEMENT OF MENTAL HEALING.

(From the Boston Medical and Surgical Journal, Nov. 26, 1908.)

Few irregular movements in medical practice have succeeded in gaining so wide a publicity as the so-called "Emmanuel Movement," inaugurated and developed by Rev. Elwood Worcester, of the Emmanuel Church in Boston. The reasons for this are not far to seek. The methods used are claimed to be novel, inasmuch as "sound religion" is associated with scientific method in the treatment; medical practice is freely acknowledged, but regarded as insufficient in certain cases; a mystical supernatural element is introduced in which prayer plays an important part; Christian Science is to be attacked in its own stronghold; and finally, the medical profession is to co-operate in the work. With this general plan the "Emmanuel Clinic" was actively begun about two years ago. It has been widely exploited, skilfully advertised, has gained many followers, and, according to its promulgators, has spread to all quarters of the earth. All this is not surprising, nor in the least disturbing, except in so far as it implicates the medical profession in a movement for which the latter can in no way be held responsible, and which now and always has been absolutely beyond its control.

It is true that at the outset Dr. Worcester gained the tentative approval of certain prominent neurologists; it is also true that others vigorously disapproved of his plan from the first; but to these small attention was paid. Many others in the medical profession with small knowledge of the real questions at issue were indifferent. The corner-stone of the movement, according to the repeated statements of Dr. Worcester, has been the co-operation between the medical profession and the Church. In this matter there has evidently been much misrepresentation. The fact is that the medical profession as a whole in this city, as in others, never has stood behind the movement and is increasingly less inclined to do so. Even its chief medical apologist has on more than one occasion said that social workers and others were more competent to carry on the work than ministers. Certainly the neurologists of this and other communities as a class regard the movement as a mistake and inimical to the best interests of the community at large. In view of his repeated expressions of opinion in this matter, it would seem to be incumbent upon Dr. Worcester to restate his attitude. That he now has no appreciable backing from men particularly concerned with neurological practice and teaching is apparent to those who have followed recent events, nor has he the active sympathy of other informed members of the profession. Under these circumstances we await with interest his further course. The time has certainly come to correct the wide-spread opinion, which has been so large an asset to the whole movement, that the medical profession approves of this bizarre therapeutic effort. It should be distinctly understood that the public utterances of individuals are not to be taken as expressions of general medical opinion.

Apart from all other considerations, we are

also convinced that the kind of co-operation which Dr. Worcester supposes he has is an impossibility as a general principle. It is not for a moment to be conceived that this great field of mental therapeutics is to be turned over to the churches, nor is it conceivable that representative medical men will indefinitely stand between the public and the minister to pass on patients which it is their manifest duty to treat themselves. That the profession at large needs instruction in the practice of psychotherapy we will willingly admit; we believe that such instruction should be given at medical schools, to the end that the limitations as well as the possibilities of mental treatment be laid down, so far as our present knowledge permits. We furthermore believe that common loyalty to the profession and its traditions should not permit us to encourage an irregular movement in psychotherapy any more than we would encourage an irregular movement in any other department of medicine. We emphatically deny that Dr. Worcester has anything to offer in the way of psychotherapeutic procedure which is denied the physician, unless it be the emotional element associated with prayer, and this, whatever it may be in last analysis, is insufficient upon which to build a cult of healing. The public appeal and newspaper notoriety are so totally alien to legitimate medical methods that they require no discussion at this time.

The only knowledge which is of value in the field of abnormal psychology and mental therapeutics has been gained from the laborious investigations of psychologists and physicians. This all are free to use, but that its use is best safeguarded and likely to be productive of the best results in the hands of men with general medical training will not generally be denied. The field is foreign to the ordinary clerical mind and is not a matter which in any large way concerns the churches, which very intimately concerns the medical profession, and which the profession is quite capable of handling in the future as it has in the past. If the fate of the churches, as Dr. Worcester implies, depends upon a personal healing ministry in the physical sense, it is surely time that their doors be closed. We are, however, under the impression that the churches have never been so active as now in good works, in the establishment of hospitals and dispensaries, and in legitimate co-operation with medicine. It will be highly unfortunate if this salutary relation, which has existed for centuries, be strained by a confusion in the proper work of the two supplementary professions.

In a broad consideration of the Emmanuel Movement we make no denial whatever that Dr. Worcester and his associates have benefited any individuals; so they did before the movement was started, and so do many others whose names are never heard, both within and without the Church. The good the movement does is apparent and may be accepted for what it is worth. The harm it does is fundamental. It places both the medical and the clerical profession in a false light; it raises false hopes; it interferes with the relations between doctors and their patients; it encourages superficiality in the consideration of a great problem; it misrepresents the significance of the psychotherapeutic movement; it is an abuse of medical charity; it retards progress in the only direction in which normal psychotherapeutics can grow—through the medium of the medical profession.

It is perhaps idle to speculate regarding the future of the movement. This much seems certain—that it has wholly alienated the best minds in the medical profession, and that the Church is skeptical, and in some instances openly antagonistic. Under these conditions we can see in it few elements of permanence.

### MEDICAL FEES.

(From the Maryland Medical Journal.)

The letter of Dr. Cathell is deserving of attention by all family physicians. It is a shame that the specialist who doctors a tiny portion only of the body should obtain, often for really insignificant services which do not at all affect the health of the patient or his ability to live successfully, large fees, while the man who instructs him in the principles of health, saves him from dangerous systemic illnesses, watches by his bedside, often the whole night through, and unravels the tangle of disease in many organs at the same time, gets a pittance which is unequal to the demands of even the most economical housekeeping. It is time that the physician of good parts should demand a suitable return for his work. He needs to be taught the dignity of his calling and of his position in the community.

By some incomprehensible disregard of business principles our fathers fastened upon us the per-visit system of collection. There is no sense in the system; it is outrageously unjust to the doctors, and its injustice to the patient is controlled only by the custom of reducing the rate according to the deficiency of the patient's bank account. The young man who tries to maintain the fee-table rates cannot win practice, and the older man who maintains them gets no proper return for his increasing skill and experience.

One of the things that keeps up the citizen's often laughable awe of the specialist is that the physician demands so much less for his services. We find patients surprised at receiving any bill at all for attendance in peritonitis and cheerfully paying a specialist \$20 for spraying the nose. Now, specialism has been the glory of the profession, leading in the forefront of medical and surgical progress. Specialism has broken away from the suicidal traditions of our fathers concerning fees. Our complaint is not that the specialist gets his money, but that the practitioner does not get his share.

There is no doubt that it requires, on the average, more brains to be a general practitioner than to be a specialist in a small region of the body. Many a reader will be surprised at this statement, but it is true. The initial expenditure of brain force may be greater, but the sphere is so small that diagnosis soon becomes easy and therapeutics becomes a routine. There are among specialists men of pre-eminent capacity and inexhaustible ingenuity who abundantly earn the enormous fees which they charge; there are diagnostic and therapeutic services of specialism which require extraordinary skill; but the general run of cases which go to the specialist should not bring remuneration at a higher average than those which are seen by the family physician. We would not have the specialist lower his rates, but have the family physician increase his till the same general level is reached.

This improvement should be first instituted by the older physicians. Their patients would in most cases submit to the advance if it were made wisely. So firmly have physicians of the past established in the mind of the public the per-visit rate that only the adoption of the method urged by Dr. Cathell can bring the desired change. It is a more dignified method than the older one. It may be begun by ceasing to make the bill an exact multiple of the number of visits—a little more than the dollar or two-dollar per. If the patient objects, he is told that physicians of standing are now estimating their charge more in accordance with the difficulty of the case than formerly; that such and such elements demanded unusual care and skill. If he writes an indignant letter and demands an itemized account, an account in which the sum charged each month, or even each week, may be sent. Younger physicians may train their patients from the beginning to the improved method.

Eventually we must in all authoritative fee tables that we publish state that the difficulty of treatment and responsibility incurred are the basis of charges, and that the list of visits paid is simply a memorandum to aid the memory. In this way the law and the courts can be brought to endorse the more enlightened system of charges. With constantly increasing rates of expense in food and service it is impossible to continue the rates of our great-grandfathers in medical attendance. It is difficult for one physician to make the change alone. All pulling together can succeed. This is why a free and general discussion of the subject is desirable.

(This appeared some time ago. We marked it for insertion in our Journal, but it was mislaid. The delay, however, has not weakened its forcefulness.—Editor.)

### NEW EMMANUEL METHOD.

#### Patients First to Have Care of a Physician.

(From the New York Tribune, Jan. 28, 1909.)

Boston, Jan. 28.—Owing to the criticisms of certain physicians and surgeons relative to the methods under which the Emmanuel movement has been carried on by the clergy, a radical change in these methods is to be made, and all patients treated by the clergy connected with this movement will first have the care of a physician.

A set of rules has been drawn up by an advisory board composed of Drs. Joel E. Goldthwaite, Richard C. Cabot, James G. Mumford and Joseph H. Pratt. These well-known physicians believe in the Emmanuel movement, according to a signed statement to that effect, but are also of the opinion that methods different from those so far practised are necessary to bring the movement into closer relationship with the physicians. The rules they have drawn up are designed to avoid some of the earlier mistakes made by the clergy in treating patients who have no family physician.

**Typhoid Fever in New Jersey.**—It is reported that typhoid fever prevails to a disquieting extent in Salem, N. J., and in the adjoining section of country in New Jersey and Pennsylvania, and complaint is made that the local health authorities are not doing all they might to prevent the spread of the disease.



## SANATORIA AND HOSPITALS.



## NEW JERSEY SANATORIUM FOR TUBERCULOUS DISEASES.

Glen Gardner, Hunterdon County.

We take the following from the superintendent's report for the year ending October 31, 1908:

During the year 553 applicants were examined for admission; of this number 234 were rejected and 319 entered the Sanatorium; of these 105 paid the nominal sum of \$5 weekly, the remainder being treated free.

The total number of patients discharged during the year was 216, of which 118 were males, 98 were females.

Eighty patients left the Sanatorium with a residence of less than one month, and are not considered in the final results. These non-considered patients include those who were admitted for a trial, those who left because of unwillingness to follow prescribed rules, were homesick, or failed to respond to tuberculin tests. Statistics relative to these will be found on another page.

The whole number of beds in the Sanatorium were first filled September 16th. The greatest number of patients in the Sanatorium at any one time was 108, on September 18th.

All patients whose physical condition would permit were required to perform a certain amount of work each day in and about the Sanatorium. By this means they were prevented from becoming introspective, and at the same time were better prepared to undertake some work on leaving the institution.

It will be noticed that our statistics show a considerable proportion of advanced cases in spite of our efforts to obtain those in the earlier stages of the disease. From this it would appear that much work yet remains to be done to teach the necessity for early diagnosis and treatment if permanent cures are to be expected.

The average length of stay of all considered cases was 4.4 months, the usual difficulties being experienced in obtaining willingness of patients to remain a lapse of three months without bacilli and constitutional symptoms, or as arrested until two months elapse with absence of constitutional symptoms, the signs those of a stationary or decreasing lesion.

A number of more or less important improve-

ments have been made to the property during the year. These include additions and alterations to the buildings and two small shacks at the edge of the woods as lounging places for patients during the day. The grounds about the buildings have also been partly graded and seeded.

From the board of manager's report we give the following:

During the year 136 patients have received treatment at the Sanatorium for a longer period than one month; 27 have been apparently cured; 34 have been arrested; 62 improved; 13 unimproved.

Patients.	Males.	Females
Admitted within the year....	171	148
Treated during the year.....	171	148
Discharged during the year..	118	98
Remaining in Sanatorium,		
November 1.....	53	50

The principal occupations were: Housewives, 37; houseworkers, 34; factory and mill operatives, 29; clerks, 20; students, 13; stenographers, 10; salespeople, 9; book-keepers, 8; carpenters, 8, etc.

Ages: Under 15 years, 7; 15-19, 51; 20-29, 137; 30-39, 85; 40 and over, 39.

Single, 171; married, 141; widowed, 7.

Classification: Incipient, 28 cases, 75 per cent. apparently cured, 21.4 per cent. arrested, 3.6 per cent. improved. Moderately advanced: 48 cases, 10.4 per cent. apparently cured, 52.1 per cent. arrested, 37.5 per cent. improved. Far advanced: 59 cases, arrested 5.1 per cent., improved 72.9 per cent., not improved 22 per cent.

A lengthy tabular statement giving detail data concerning each patient closes this good report.

The resident officers are: Dr. S. B. English, superintendent; Dr. H. B. Dunham, assistant superintendent; Miss S. F. Robbins, superintendent of nursing and matron.

**Gifts to Charities.**—The will of the late Amos Van Horn of Newark, N. J., contains bequests of \$30,000 each to St. Michael's Hospital, St. James' Hospital, Beth Israel Hospital, St. Barnabas' Hospital, the Babies' Hospital, and the Hospital for Women and Children, all of that city.

The sensation of a foreign body in the eye may be provoked by the presence of a small tarsal tumor.—*American Journal of Surgery.*

## Hudson County's Warfare on the White Plague.

(From The Evening Journal, Jersey City, January 19, 1909.)

### The Laurel Hill Sanatorium to be One of the Most Up-to-Date—Want a City Hospital and Clinic.

The war against the white plague in this county will be prosecuted vigorously. This pledge was given by representatives of the County Board at a conference with the Board of Managers chosen for the Tuberculosis Sanatorium under construction at Laurel Hill, a section of Snake Hill, and an ideal location for the institution.

Laurel Hill will not be the only battle ground. It will be the starting point, for the war is to be extended into every municipality until each has its sanatorium and band of medical and trained nurses, acting in conjunction with the county officials. The aim is to restore to health the curable patients, ameliorate the condition of those in the incurable stage and establish safeguards to check the spread of the contagion. The homes of the unfortunates, even those who live in poverty and dwell in hovels, will be put under supervision with experienced nurses to attend the doomed sufferer and teach the living how to manage the home that they may avoid contracting the disease. The crusade is to be thorough.

The Tuberculosis Sanatorium, a model, substantial structure, will not be completed for two months and it will require that time for the Board of Managers to get in perfect working order. The laws must be consulted to ascertain the power that is conferred and their rules of government must be drafted to conform to the statutes. The hospital must be finished and fitted with the appliances that experience has demonstrated are necessary. Help is to be chosen and this will occupy time, as care will be exercised to secure the aid of competent persons recommended by medical men who have become specialists in consumption. The method of procuring the supplies has been settled, as rigid economy is to be the rule. These will be obtained from the other county institutions at the wholesale contract prices. Not many drugs will be needed for the patients will be given open air, sunshine, rest, sleep, good food and the advantage of the recent discoveries in the laboratory-serum treatment.

But the energetic physicians on the board—Dr. G. K. Dickinson, president; Dr. F. X. Stack, Dr. George McLaughlin, the expert in laboratory work, and Dr. E. J. G. Valentine, are impatient to begin operations and are seeking suitable quarters in lower Jersey City for a lung clinic. Dr Pollak will be in charge. Dr. Pollak is to be superintendent of the County Sanatorium. He has taken a special course of training and has traveled and visited the tuberculosis hospitals in this country and abroad and has studied their methods. It is proposed to have nurses connected with this Jersey City Clinic to assist in the work and attend to the stricken poor, whose strength has been sapped by the disease and who are unable to leave their homes. The work will be started as soon as a suitable place has been secured for the Jersey City branch.

They have gone a step further and communicated with Mayor Wittpenn, to whom they have

pointed out the need of a city hospital for the treatment of consumptives. Investigation has shown the need of such an institution as the extent of the disease in Jersey City can be approximated from the reports of the physicians, which show that the average is three tuberculosis patients for each physician, and there are hundreds of victims who are unconscious of the fact and are striving to eradicate by home remedies what they regard as a severe clinging cold and cough without consulting a physician, a numerous class that will be found by the proposed system of investigation and inspection, some of whom may be influenced to submit to an examination if the city hospitals and lung clinic were established. It is this very class, these that are curable, that the physicians engaged in this effort in the cause of humanity are desirous of reaching that they may restore them to health. Another argument for the city hospital for consumptives is accessibility. Relatives of the unfortunates would be less averse to having them removed to the hospital for treatment if the building was convenient so that they might visit the patient. It would tend to materially increase the number cured if the city had a hospital.

The physicians on the board realize that the remote location of the County Sanatorium will impede their work, as they will encounter the opposition of relatives to having a sufferer taken to the distant institution, and prejudiced by the love for the afflicted case for the patient at home with its lack of facilities and skill may hasten to the grave one who may be cured. Dr. Dickinson submitted to the Practitioners' Club the question of a sanatorium in Jersey City, and it was discussed and the unanimous sentiment was that it is necessary to systematically and efficiently combat the disease. The County Board has solicited an audience with Mayor Wittpenn that they may explain the existing conditions and the excellent progress that would be made in the white plague crusade in this city with a suitable hospitable. The Mayor is deliberating over the subject and studying the financial side of the question, as the physicians and lay members of the board have not received his letter of invitation to the conference.

The model sanatorium at Laurel Hill will have a greater capacity than the celebrated one at Glen Gardner and equal to that of the new Jersey City Hospital. The main or administration building is a solid brick structure built with an eye to enlargement as another story can be added. It will have accommodations for forty male and an equal number of female patients. The arrangements are up-to-date, and it is located a little west of south to get the maximum of sunshine so essential as a curative agency. It is provided with broad piazzas and has double windows extending to the floor and a patient can be wheeled in his bed to the piazza. The windows are arranged so that one-half can be closed and the other half open. The interior is laid out on sanitary lines, neat and cheerful and the toilets are of marble and tiling. The arrangements prohibit patients from straying into the neighboring buildings. In addition there are six shacks, three of which will accommodate four patients, a total of 104, and the accommodations can be easily increased to 120 without crowding and the old almhouse will be added if it is required, as the Board of Managers has been informed that it will be turned over to them if it is wanted.



The board is enthusiastic over the building and facilities, and will seek the co-operation of the physicians of the county and the energetic women identified with the charities organizations and may create a board of visitors, with Mrs. C. B. Alexander as its head, as it was through her persistent effort that the officials were aroused, and Mayor Wittpenn, then County Supervisor, became interested and by economy provided an available fund to pay for the erection of the sanatorium without placing a dollar on the taxpayers' burden, and added an institution that will redound to the credit of the county and the medical men who have gladly sacrificed leisure and profit to plunge into a struggle to benefit their fellow men.

### St. Mary's Hospital Treated 323 Patients.

That St. Mary's Hospital, Orange, is growing in favor was made apparent yesterday afternoon at the annual meeting of the staff, when the reports submitted showed substantial gains financially and in the number of patients treated. During the year 301 cases were admitted, of which 145 were medical admissions and 156 surgical. The number of operations performed was 116. The number of patients who died in the institution was twenty-six. The number of patients holding over from 1907 was twenty-two, making a total number of cases treated during 1908 323.

While the financial statement for the year was not ready for publication, the hospital's finances are in the best condition they have ever been, despite the business depression.

The following officers were re-elected: Dr. M. Herbert Simmons, of Orange, chief of the staff; Dr. Charles W. Banks, of East Orange, chief surgeon; Dr. Edward Riggins, of Orange, registrar, and Dr. Winifred D. Banks, of East Orange, secretary. The staff will meet the first Monday of each month.

### Essex County Isolation Hospital.

The criticisms of the County Isolation Hospital published in the daily papers have ceased to appear since the reply of the board of managers by its president, Dr. M. J. Synnott, in which it was shown that their resources were being best used for diphtheria and scarlatina, while smallpox, if it occurred, would be vigorously handled, and tuberculosis was being carefully considered with view to recommending to the Board of Freeholders adequate plans to provide for advanced cases—the ones that are everywhere the worst sources of infection and also the least cared for by any of our institutions. The replies to a circular letter from the board of managers to all physicians in the county were practically unanimous in favor of such a plan.

F. W. P.

### Hospital Epidemic.

The Mountainside Hospital at Montclair was closed about the middle of January on account of an outbreak of diphtheria among the nurses. We are promised a report of it by Dr. Synnott. The following clipping we take from the N. Y. Tribune.—Editor:

It is worth while bearing in mind that subcutaneous swellings are sometimes gummata.—*American Journal of Surgery.*

## Obituary.

**BARNES**—At Springfield, N. J., January 16, 1909, Adelaide Young Barnes, wife of William M. Barnes, M. D., aged 48 years.

**CARHART**—Near Blairstown, N. J., January 3, 1909, suddenly by accident, Elizabeth Gray, wife of Henry O. Carhart, M. D., of Blairstown.

**GRAY**—At Summit, N. J., January 22, 1909, John Walter Gray, M. D. Dr. Gray, who was unmarried, was born on Jersey City Heights, December 24, 1876. After completing a high school course he began the study of medicine in the New York University and graduated therefrom in 1897. During the Spanish-American War he served as first lieutenant and assistant surgeon in the Third and Fourth Regiments, New Jersey Volunteers. He commenced practice in Summit in 1899 and soon had a large practice. He was a member of the Medical Society of Elizabeth and of the Summit Medical Society; of the latter he was one of the charter members. He belonged to several fraternal and social organizations, among them the Overlook Lodge, F. and A. M.; the Overlook Club and Canoe Brook Country Club of Summit. The cause of Dr. Gray's death was valvular disease of the heart. The fatal attack was brought on six weeks before, when he worked for several hours to save the life of a woman patient, and after removing her to Overlook Hospital he returned to his home greatly prostrated. He was greatly beloved by his brother physicians and his patients. The funeral services were held on Sunday, the 26th, at 3:30 P. M. and the interment was in Stanlev Cemetery.

**DODD**—Dr. Bethuel Lewis Dodd, one of the oldest practitioners of Essex County, New Jersey, died at his home on December 5, after a short illness. Dr. Dodd was born in East Orange in 1825, and was graduated from the College of Physicians and Surgeons, New York, in 1852. During the Civil War he was examining surgeon for the Thirteenth and Twenty-sixth New Jersey Volunteers, was at one time surgeon-in-chief of the Pennsylvania Railroad, was for ten years county physician, and had also served as police surgeon for the city of Newark. He had practised but little for some years past.

## Personal Notes.

**Dr. William J. Chandler**, we are pleased to report, has sufficiently recovered from his accident to be out and has partially resumed practice.

**Dr. William H. Lawrence, Jr.**, of Summit, took part in the symposium on fractures at the meeting of the Summit Medical Society, January 27th.

**Dr. Eugene T. Oliphant**, of Bridgeport, Gloucester County, president of the county society during the past year, on January 12th fell on alighting from a train and sustained a compound fracture of the thigh just above the condyles. He was conveyed to his home and is under the care of Dr. Paul Mecray, of Camden. He has the sympathy of his medical friends and a host of patients, who hope for his speedy recovery.

**Dr. Briscoe B. Ranson, Jr.**, of Maplewood,

according to announcement cards, is to be married at Staunton, Virginia, on February 4, 1909.

**Dr. J. Boyd Risk** (Mayor), of Summit, addressed the Summit Medical Society on "Fractures," January 27th.

**Dr. H. O. Carhart**, of Blairstown, seriously injured and his wife killed at grade crossing.

While driving over the tracks of the New York and Susquehanna Railroad at Vail, near Blairstown, Dr. and Mrs. H. O. Carhart were run down at a grade crossing by a milk train at noon yesterday. Mrs. Carhart was instantly killed, and Dr. Carhart had both legs and both arms fractured and is in a critical condition. The horse was killed and the carriage was knocked to pieces. Mrs. Carhart had accompanied her husband on one of his professional visits. It was while hurrying home at Blairstown that the accident occurred.

Dr. and Mrs. Carhart were married last summer. Mrs. Carhart was a professional nurse in the Paterson Hospital when Dr. Carhart was a patient in that institution a couple of years ago suffering from a fracture of one of his legs. She had charge of the ward in which Dr. Carhart was a patient. An attachment grew up that resulted in their wedding last summer.

Dr. Carhart is a native of Phillipsburg and had been a prominent Democrat in this county for several years. He was last week elected county commissioner.

(We take this account from the Newark Evening News of January 4th. The fractures were not so many as reported, having been only of the fibula and internal and external and malleoli. Although his condition was serious, we are glad to learn, through Dr. W. C. Allen, that he is recovering. He has the sympathy of the profession in his great sorrow, and his distress from personal injuries received.—Editor.)

## STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

### Monthly Statement of Mortality, December, 1908.

The number of deaths reported to the Bureau of Vital Statistics for the month ending December 15, 1908, was 2,695. Pneumonia caused 203 deaths, an increase of 20 over the previous month and 13 less than the corresponding period last year; other diseases of the respiratory system show a slight increase which is usual at this season of the year. By ages there were deaths as follows: Under one year, 564; one to five years, 198; over sixty years, 750.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending December 15, 1908, compared with the average for the previous twelve months:

Typhoid fever, 31 (34); measles, 11 (13); scarlet fever, 24 (34); whooping cough, 6 (20); diphtheria, 68 (45); malarial fever, 1 (3); tuberculosis of lungs, 283 (295); tuberculosis of other organs, 40 (50); cancer, 141 (128); cerebro spinal meningitis, 12 (28); diseases of nervous system, 259 (360); diseases of circulatory system, 336 (318); diseases of respiratory system (pneumonia and tuberculosis excepted), 166 (179); pneumonia, 203 (248); infantile diarrhoea, 98

(219); diseases of digestive system (infantile diarrhoea excepted), 176 (196); Bright's disease 165 (202); suicide, 28 (37); all other diseases or causes of death, 647 (595); total, 2,695 (3,004).

### Laboratory of Hygiene, Bacteriological Department.

Specimens for Bacteriological Diagnosis—From suspected cases of diphtheria 435, tuberculosis 344, typhoid fever 159, malaria 12, miscellaneous 16, total 966.

### Laboratory of Hygiene, Division of Food and Drugs.

During the month ending December 31, 1908, 685 samples of food and drugs were examined in the State Laboratory of Hygiene. There were found below the standard 3 of the 70 specimens of milk, 7 of the 40 of butter, 7 of the 76 of cider vinegar, 5 of the 119 of pepper, 3 of the 7 of tincture of iodine, all 3 of the tincture of opium, 1 of the 12 of honey. Ten suits had been instituted against persons for adulteration of milk, butter, pepper or vinegar. There were found up to or above the standard all the 222 specimens of spices except pepper, all 19 of cream of tartar, 13 of witch hazel, 9 of coffee, 21 of cocoa, 11 of sausage, codfish, cream, maple syrup, borax and alcohol.

### Division of Creameries and Dairies—Monthly Report, December, 1908.

Creameries—Total number of creameries inspected, 5.

Location and Owner—Andover, Sussex County, Fulboam Dairy Company; Cranbury, Middlesex County, Holeman Jordan; Lafayette, Sussex County, Newark Milk and Cream Company; Monroe, Sussex County, Newark Milk and Cream Company; Trenton, Mercer County, Castanea Dairy Company.

Number of licenses issued, 2.

Dairies—Total number of dairies inspected, 100.

Location, County and Twp.	No. in- spected.	Disposal of product.
Essex County—		
Livingston .....	17	Orange
Roseland .....	1	Orange
West Orange....	12	Orange
Hudson County—		
Hoboken .....	4	Hoboken
Mercer County—		
Ewing .....	1	Trenton
West Windsor...	2	Princeton
Middlesex County—		
East Brunswick..	2	New Brunswick
North Brunswick.	9	New Brunswick
Piscataway .....	5	New Brunswick
Raritan .....	1	New Brunswick
South Brunswick.	2	New Brunswick and Princeton
Morris County—		
Chatham .....	1	Orange
Somerset County—		
Franklin .....	15	New Brunswick
Sussex County—		
Green .....	8	Andover Creamery
Lafayette .....	20	Lafayette Creamery

Number of samples of water taken from dairy premises, 49; creamery premises, 1; number reported polluted, 20; number reported suspicious, 13; number reported probably safe, 17.

During the month ending December 31, 1908,



105 inspections were made in 66 cities and towns.

The following articles were inspected during the month, but no samples were taken: Milk, 156; butter, 608; foods, 771; drugs, 273.

Other inspections were made as follows:

Milk wagons, 119; milk depots, 4; grocery stores, 504; drug stores, 42; milk cans, 341.

### Division of Sewerage and Water Supplies— Monthly Report, December, 1908.

Total number of samples analyzed in the laboratory, 143, as follows: Public water supplies, 40; dairy wells, 50; sewage samples, 24; private wells, 22; creamery supplies, 1; miscellaneous, 6.

#### Inspections.

Public water supplies inspected at Belvidere (2), Glassboro, Phillipsburg, Roebling, Burlington, Frenchtown, Woodstown, Lakewood. Private supplies inspected at South Bound Brook, Trenton Junction.

Sewage disposal plants inspected at Plainfield, Glen Gardner, Lakehurst, Wenonah, Merchantville, Burlington, Moorestown, Haddonfield, Princeton, Woodstown, Vineland, Flemington, Freehold, Overbrook.

Cases of special pollution investigated at Phillipsburg (2), Lakewood, Asyla, Perth Amboy, Birmingham.

Ice supply investigated at Lawlence Station. Stream inspection continuing on Delaware, Raritan and Shrewsbury Rivers.

Number of persons summoned before the board, 52. Cases referred to attorney-general, 9.

### The Chicago Health Department and the Doctors.

The *Weekly Bulletin* of the Chicago Department of Health for November 28, says: "The medical profession is suffering from overcrowding. The condition is patent. They are writhing under it, and they grasp at remedies. It is unfortunate that this small group hit upon contagion in their blind groping and narrow view. The community demands protection. Each year sees the standard higher. Now that politicians, the clergy, and all society is enlisting to fight preventable diseases, it is unfortunate that even a small group of doctors should enlist under other banners. Of course, the medical profession in the main is for the right now, as always." This is terrible, and mysterious as well. Are the Chicago doctors spreading contagion in order to make patients? If not, what are they doing? The Three Guardsmen, Lieutenants U. S. A., Medical Corps Reserve, who conserve the morals of the A. M. A., should get busy.—*New York Medical Record*.

### MEETINGS OF THE COUNTY MEDICAL SOCIETIES

County	Secretary	Place of Meeting	Time
Atlantic	W. F. Ridgeway, Atlantic City		
Bergen	Charles W. Harreys, Ridgewood	Elks' Hall, Hackensack	2d Tuesday each mo.
Burlington	George T. Tracy, Beverly		April 14th, 1909.
Camden	Daniel Strock, Camden	Dispensary Bldg., Camden	8 P. M. Feb. 9, 1909
Cape May	Nathaniel A. Cohen, Wildwood		April 6th, 1909.
Cumberland	Amos J. Mauder, Millville	Doughty House, Millville	11 A. M. Jan. 12, 1909
Essex	Ralph H. Hunt, East Orange		
Gloucester	George E. Reading, Woodbury		
Hudson	Arthur P. Hasking, Jersey City	Lincoln Hall, Jersey City	8 30. P. M. Feb. 2, 1909
Hunterdon	O. H. Sproul, Flemington		
Mercer	Edgar L. West, Trenton	Council Chamber, City Hall, Trenton	February 9th, 1909.
Middlesex	Benj. Gutmann, New Brunswick	Schussler's Cafe, New Brunswick	April 21, 1909.
Monmouth	Harry W. Ingling, Freehold		March 9th, 1909
Morris	Henry W. Kice, Wharton	Dover Hotel, Dover	March, 1909.
Ocean	Ralph R. Jones, Toms River	Lakewood	April, 1909
Passaic	Elias J. Marsh, Paterson	Braun Building, Paterson	8.30 P. M. Feb. 9, 1909
Salem	Henry Chavanne, Salem	French's Hotel, Woodstown	Feb. 3, 1909.
Somerset	C. R. P. Fisher, Bound Brook		April 8th, 1909.
Sussex	Shepard Voorhees, Newton		
Union	P. Du Bois Bunting, Elizabeth	Elizabeth General Hospital, Eliz'th	3.30 P. M. April 14, '09.
Warren	William J. Burd, Belvidere		

Secretaries will please notify the editor, Dr. D. C. English, New Brunswick, promptly of places and times of meetings.

The JOURNAL will be glad to print original papers from any source, preferably from members of the State Society, provided that they shall be of sufficient merit and shall be contributed to this paper exclusively.

Anonymous communications will not be published, but the name of the author of a communication will be kept secret if the editor is requested to do so.

The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer. We cannot promise to return unused manuscript.

Authors may obtain reprints of their papers at cost, provided a request for them be written on the manuscript.

Matter received after the 20th of any month cannot appear in the next issue of the JOURNAL.

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## THE DEVELOPMENT OF THE NAVY MEDICAL CORPS TO MEET THE MODERN REQUIREMENTS OF SPECIALIZATION IN MEDICAL PRACTICE.\*

By Presley Marion Rixey, M. D.,  
Surgeon General, U. S. Navy.

In thinking of an appropriate subject upon which to address you this evening, in response to your very cordial invitation, I was reminded of a letter received from a Congressman of New Jersey some time ago, asking "if the officers of the Medical Corps of the Navy were men of character and standing and if they were appointed by influence and without examination as they formerly were."

This evidence of lack of information concerning the Medical Corps of the Navy in one so intimately connected with the affairs of the nation caused me some apprehension, and in selecting the subject of my paper for this evening it was my aim to give you a comprehensive picture of the modern day requirements of medical officers of the navy and particularly to clearly outline the difficulties encountered by medical officers in conforming to all the demands arising in the service in consequence of the great advances of medical science.

The progress of the profession in every component branch has developed the need of specialization, which has met quick response in civil practice, but in the navy the

same progress has only created a greater demand upon each individual member of the Medical Corps for a familiarity with the important advances along the different lines of medical science, and has not freed him in the least from the need of general knowledge. Specialization in its accepted sense and to the degree observed in civil practice is not possible in the navy, as every officer must be self-reliant and competent to perform any duty to which he may be assigned and to care for any medical or surgical condition that may fall to his care. This requirement cannot be evaded either by the individual or the corps as a whole. On the one hand, a medical officer may find himself in any part of the world, isolated from modern conveniences and appliances and beyond the possibility of sharing responsibility with a colleague. On the other hand, innumerable methods of diagnostic precision and therapeutic practice must now be employed in the proper and efficient discharge of medical duties. In the not distant past, these time-effacing procedures were unknown and medical practice was less complicated and exacting, so that one man could accomplish the details of his work with entire fidelity to the established standard of excellence in the light of that period. To-day the standard of excellence in the same field of work is vastly more complex and the observance of every procedure, recognized as indispensable to the proper study, prevention and management of disease, necessitates a certain division of work—a greater number of men to cover the same ground. How are these modern requirements to be accorded practical recognition and adjusted to the inalienable conditions of naval service? This is the problem which the Bureau of Medi-

\*Read before the Essex County Medical Society  
October 13, 1908.



cine and Surgery has had to face in the development of the Naval Medical Corps, and, though its complete solution has not been effected, much has been accomplished. How and by what means the new and ever-changing conditions are being met I shall attempt to explain. Before taking up that division of my subject, however, it is necessary to a clear understanding of the full import of the task in hand that the character of other features of a naval medical career be given consideration.

In the first place, as regards the character and standing of the members of the Medical Corps of the Navy, I would state that they should be the equal of any organized body of medico-military men in the world, and their record of service justifies this assumption. They are carefully selected by a special board of medical officers from candidates representing the best schools of the country, and their acceptability is determined, first, upon a high standard of professional qualifications, and then upon consideration of moral and social fitness, which latter are matters of careful investigation.

The naval service, by virtue of its world-wide intercourse, is, as John Paul Jones contended, essentially aristocratic, in that it requires the instincts and discernment and conduct of a gentleman in its officer personnel. The status of the medical officer in relation to the rest of the service is established on a plane of equality, and, as the officers of the navy have entree to the best wherever they go, and come in contact with the most cultivated and interesting people of every nation, it is necessary that personal qualifications should enter into the determination of general suitability for the service. Moreover, the wide range in the character of their clientele and responsibilities call for a high professional ability and a ready adaptability. They are charged with the care of the enlisted personnel and officers of the highest rank and their families, and they are called upon constantly for medical advice and treatment by people native to the country in which they are situated.

The charge of the financial interests connected with the running of the medical department of the navy makes it necessary that they be men of strict integrity and capable of handling the intricate and complex organization which has marked its gradual development during an existence of over one hundred years.

The successful medical officer in the

navy often becomes known throughout the entire service and enjoys a reputation and the confidence and love of his clientele that is of the tenderest character and of the greatest personal satisfaction to him. The life work of the officers of the Medical Corps is to do thoroughly and well the tasks allotted to them, and in an orderly and unostentatious manner, and they care only to deserve the respect and esteem in which they may be held and to advance the general interests of the service. As long as this is the dominating spirit, reward will be generous and genuine.

In every profession, in every part of the world, in every age, favor and influence have affected and ever will affect, to a greater or less degree, the careers of individuals; but it is equally certain that a really good man usually succeeds in the end in securing due recognition of his merits and never sinks to the level of the idle or unintelligent. The increasing demands upon his strictly professional knowledge make it imperative that he shall not rust or fall behind.

The increase of the Navy and Marine Corps to 55,000 men, and the care of the large civilian population, employees at yards and stations, together with the care of entire communities, such as are met with in the islands of Guam and other distant stations, place an enormous population under the care of navy medical officers. They are assigned to stations where there is not only the necessity for the care of diseases peculiar to the navy and peculiar to men, but also for a knowledge of all the specialties in medicine, including diseases of women and children. They must be familiar not only with the diseases prevalent in the United States, but also those which are peculiar to foreign countries, particularly the tropics; they must be familiar with all the laboratory methods in connection with the detection of diseases, and be able to employ them accurately; and they must be familiar with all the quarantine regulations of their own and of foreign countries and the sociological, as well as the medical, aspects of all nations.

The foregoing may serve to indicate that the navy offers a broad field of professional activity of a practical sort, and there are fine opportunities for original work and initiative in many meritorious and promising directions. There are plenty of problems, which are matters of distinctly medico-naval concern in the first

instance, though of general scientific interest as well, to call in play the keenest observations and the nicest ability in investigation.

We greatly desire that the highest type of young medical men will continue to be attracted to the navy as a theatre for their professional careers. It is a scientific service, and there is every reason why its position as such should continue to improve. There is abundant work for the energies of every one, including those of special bent, and as far as may be consistent with the demands of the service for general knowledge and general ability medical officers are allowed and even encouraged to develop themselves highly in some one branch of medical science, just as original research is approved and facilitated. There are already many officers who have taken up and are pursuing special studies, as for example, ophthalmology, bacteriology, pathology, tropical medicine, hygiene and sanitation, chemistry, genito-urinary diseases, surgery, etc. In this manner the medical department of the navy is conforming to the modern requirements for special ability in certain defined lines, and the bureau's effort to secure authorization for a corps of dental surgeons is further evidence of our recognition of the needs of the times. The establishment of a corps of female nurses, which was authorized by the Sixtieth Congress, is a big step in the development of the medical department to conform to modern requirements, and the proposed reorganization and provisions for the improvement of the Hospital Corps, which represents the apothecary and male nurse branch, will incalculably increase the efficiency of the medical department to a more perfect conformity with the present day standards of medical practice and hospital management.

In this connection, naval pharmacists, as the senior grade of the Hospital Corps, are of extreme value in those duties which are not within the proper field of the medical officer, but for which executive ability, a high sense of responsibility and a thorough knowledge, not only of their profession, but of every detail of the work which attaches to the various ratings in the Hospital Corps, are required.

Now as to the provisions which have been made and are being improved to equip officers for every detail of their responsibilities under modern professional and service conditions. Among these, the first and most important is the Naval Med-

ical School which was established at Washington in 1902 and has been since rapidly developed in every feature of equipment and instruction until now it may be truthfully said to have taken its place among the best post-graduate schools, not only of this country but of the world.

While theory is given the place it demands, the cardinal idea of the work of the school is to fit officers for their military duties and develop them under careful personal tutelage to their highest point of attainment for the most capable performance of their practical professional work. Medical colleges, even those which prescribe a four-year curriculum, are laboring under the disadvantage of too short a course. In this regard, the Naval Medical School serves an especially important purpose. It gives that finishing touch to their training which brings their attainments within conscious control for practical application, not only in the care of those who fall stricken with disease or injury, but in the management of threatened epidemics and all medical and sanitary emergencies. The course at the Naval Medical School broadens their knowledge and practical capabilities to include those special subjects which naval surgeons have need to know and those peculiar responsibilities which devolve upon them and constitute a most unrelenting demand for professional alertness.

Tropical diseases have come to occupy a large place in naval medical experience. The nation's interests are so firmly fixed, and the naval surgeon's sphere of practice is so frequently placed in tropical latitudes that now, more than ever, he is called upon to diagnose and treat their contributions to human suffering, and the development and scope of this branch of medicine has reached such proportions that too much stress can scarcely be laid upon the special need that the naval surgeon be prepared in this important field of work. Again, while it is required that the naval surgeon be well qualified in all professional branches, the science of military and naval surgery represents a special need.

The Navy and Marine Corps are our first line of defence, and, as frequently happens, they are often the advance guard and sometimes participate in permanent occupation, such a force is subject to all the usual hazards of operations on shore, and it is the liability to such duty which makes it necessary that the naval surgeon shall be posted with regard to military surgery.



Naval surgery differs widely from civil and military surgery in certain notable respects, and its distinctive features are best represented by wounds inflicted by naval ordnance, by burns and scalds, and by other injuries peculiar to modern naval warfare (see records of Russo-Japanese War). Therefore, preparation for a naval battle does not consist solely in the general arrangements for the care of the wounded on board ship, although even that duty is not a simple problem nor one to be undertaken without its serious study as embraced in naval surgery.

Naval hygiene is another subject so distinct in the vast science of preventive medicine that it occupies a position of unusual importance among the other courses found necessary to fit the graduate in civil medicine for the naval service, and the time devoted to it would be none too long if it could be doubled. The courses in animal parasitology, medical climatology and quarantine are also of extreme value in the preparation of officers for the efficient performance of their duties. Nowhere in this country can they receive that special training demanded by the naval service except at the Naval Medical School, and the work of this institution, therefore, is a continued and invaluable benefit to the government.

Not only are the newly appointed afforded the advantages thus indicated, but every possible provision is made, in our ambition for the broad development of the medical service of the navy, that all shall keep in touch with the progress in their profession throughout their service.

The bureau has for many years furnished medical libraries and periodicals to medical officers wherever stationed, and during the past year the whole system of supply and distribution was revised and made more comprehensive. In addition to the usual journals from the public press, which are thus being widely circulated throughout the service, one or two copies of each of certain special foreign or home serial medical publications are subscribed for for the Naval Medical School and the bureau, in order that the corps of instructors may be placed in possession of the latest information from all sources for the purpose of teaching, in the one case, and that the bureau may be in the position to carry out one of the important purposes of the Naval Medical Bulletin, in the other. These special journals are rarely, if ever, seen by the medical officers scattered

throughout the service, and it would be impossible, on account of the expense involved, to place them within their reach. As a matter of fact, it would be unprofitable to do so; for, in this progressive age, it is entirely beyond the capabilities of any one man to read all the important medical literature. Yet, it is absolutely necessary to keep in touch with every advance, and the bureau, therefore, undertakes to review the great bulk of original work which is currently reported and to prepare abstracts for publication in the quarterly bulletin.

This bulletin has come to occupy a very important place as an educational factor in the navy as well as in a broader field, including other government service and civil practice. It has a broad range of utility, for besides the strictly professional information which it bears to every medical officer, and the opportunity for the discussion of medico-naval problems which it offers, it serves as a ready means to communicate with each member of the Medical Corps concerning matters of direct and immediate importance to the service as a whole, which may come to light in the Navy Department.

Starting then with the Naval Medical School and Hospital as an educational centre fully equipped for the instruction of all that pertains to naval medical and surgical work, for medical officers, the training school for male nurses and the school for the female nurses, it is now possible for us to look forward confidently to a competent medical personnel for the navy at large.

We have eighteen general hospitals, many of them new and all of them either perfected in organization and construction to comply with the latest requirements of up-to-date methods or being remodeled and rebuilt to meet all these requirements. In this work it is the present intention to have each institution to conform to a general plan which shall make each hospital complete in itself, with provisions for every type of case, with efficient and ample laboratory facilities under the direction of competent and enthusiastic workers; with model operating-rooms complete in all details; with disinfecting plants, laundries, kitchens, store-rooms and spacious and comfortable modern wards for the care of the sick men and officers.

These large hospitals are situated at the important naval stations in this country

and at the various naval bases in our foreign possessions. It must be remembered also that these institutions are entirely under the direction and supervision of medical officers; we have no civilian superintendents or purveyors as most civil hospitals have. This condition, therefore, calls for medical men of the highest ability in the work of hospital organization as well as professional skill, and adds much to the arduous duties of these institutions. A carefully conducted hospital requires the constant care and watchfulness of four to six medical officers. This one item of general hospitals, widely separated, comprises more institutions of this kind than are found under the charge of any one body in the largest municipal communities and should give you an idea of the extensive experience to be obtained in hospital work.

If, now, you will realize that each large battleship of to-day has a complement of from 700 to 1,000 men and is fitted with facilities for the care of the sick, consisting of a ward of from 20 to 30 beds, with a complete operating room, a contagious ward, baths, dispensaries, offices and facilities for practical laboratory work; with a complement of two or three medical officers, a skilled druggist known as a hospital steward, and six to eight nurses, you will see that each battleship presents facilities for the care of the sick and wounded fully equal to a small army post hospital. These ships, as regards the quarters for the sick, are splendidly equipped, and few civilian practitioners have an outfit with anything like the facilities furnished the naval medical officer for his work aboard ship. The average expense of fitting and equipping such sick quarters is not far from \$20,000 apiece.

In connection with this central and permanent station, we are now making provision for at least one operating and dressing room, which is fully protected, for use in battle, and fitted with ample dressings, hot and cold water, and equipment for all work to be expected in time of battle; also, in addition to this central station for action, at least two dressing stations are provided. So that you see we may reasonably consider each battleship as equivalent to an additional small hospital, thus raising the number of hospital factors in this class to about forty, and steadily growing. The smaller ships, protected cruisers, gunboats, etc., are equally carefully provided with similar but smaller

quarters for the care of the sick and wounded.

A battleship is like a small community of 1,000 persons, where the medical officer becomes a very important factor and on whose judgment and knowledge, tact and foresight depend oftentimes the welfare and efficiency of such an important unit. This little community may be transported at a moment's notice to any quarter of the globe, and take up its daily life there indefinitely, exposed to all the dangers of the special location, whether it be on the west coast of Africa, with its malarial fevers and the sleeping sickness, or in the West Indies, with yellow fever, malaria, the many blood parasites, the hook worm, and all the diseases so prevalent and peculiar to this region. It may be months or years on the borders of Egypt, the Indies, Manila or China, subject to plague, cholera, small-pox, beri-beri, or any of the many obscure diseases which have made these countries so pestilential in the past. These ships may be transported from the warm Southern climates in a few days to the inclement weather of a Northern port, subject to grippe and pneumonia and the various troubles which we know here so well in our daily routine life. Can you then imagine the feeling of responsibility of the medical officer of such a vessel starting out on such a cruise, and, on the other hand, can you realize his satisfaction to bring that same ship home with a clear record, without a death, with the realization that the advances of medical science and the laws of hygiene have made it possible for us to venture into any known part of the world almost with impunity? But in order that this may be done with safety, this medical officer should be as familiar with the health conditions of each place visited as you are with your home locations.

The handling of large bodies of men, shut up in such quarters and so closely confined, makes the spread of infection so rapid that, in a few hours' time, the contamination may be widespread, and it is on this account that so much stress is laid on ship hygiene and the careful instruction of the crew in the principles of prevention and the knowledge of the dangers to health peculiar to each port.

The first duty of the medical officer is to prevent the introduction on board his ship of diseases, especially such as diphtheria, scarlet fever, cholera, plague or any of the infectious diseases.



The medical officer, therefore, must have not only an up-to-date theoretical knowledge of diseases peculiar to all sections, but a most thorough practical ability to treat them. Realizing this, it has been found necessary to establish our Naval Medical School, where such instruction may be given by men who are well-known experts in all that pertains to our profession, and you can see why we have made special efforts to equip, in a practical way, every officer, as soon as he enters the service, with special qualifications in tropical medicine, laboratory work, hygiene and operative surgery.

It is impossible for me to dwell at length on the many phases of this part of the naval medical officer's duties, but I trust I have said enough to give you an idea of the responsibility resting on his shoulders and the absolute necessity for his being more than usually capable and well informed on the very outset of his career. Of course, you fully realize the position of the medical officer under battle conditions. So much has been written on this matter recently that I think you fully appreciate and sympathize with the difficulties that attend him at such times and comprehend the importance of the constant drills and lectures to the crew, to teach them to be able to help care for themselves intelligently in time of emergency or in battle, until circumstances will permit their having the direct personal attention of a medical officer.

In trying to provide the sick and injured of the navy with the best medical and surgical aid, both in time of peace and of war, and to place in the hands of the medical officer of the navy another aid to successful care of those intrusted to them, I have for years urged and done all in my power to provide a few hospital ships, equipped after the manner of municipal hospitals, to be able to offer to the personnel of our increasing fleets the quickest and best aid in sickness or injury; to afford rapid, safe and comfortable transportation to the sick; to enable a fleet to always continue its specific duty without being hampered and diverted from its purpose by the demands of the sick; and having such hospital ships properly organized and drilled in time of peace to be ready at any moment for the possible demands of war. To wait until war comes is too late to think about a perfected hospital ship.

Picture to yourselves two hostile fleets of battleships of 1,000 or more men, each

coming into action ten or twelve miles apart, with the accuracy of fire of its 12 or 13-inch guns, supplemented as they approach each other with the secondary batteries until there is not a vulnerable spot on either side that is not pierced. Finally those huge machines of destruction are at rest, and the surgeon and the hospital corps from the hospital ship go on board. Conditions are found which beggars description and can scarcely be understood by one who has not seen a battleship after a fierce engagement. It is enough to try the strongest heart. The beautiful decks are a mass of twisted steel and mangled human beings in every phase of suffering from the slightly wounded to the dead and dying. Missiles that have dealt this destruction are not bullets as are found mostly in work on shore, but are due to the bursting of shell and to bolts and chunks of steel turned from the metal parts of the ship, from burns, scalds, etc., all mingled together on decks, in turrets, in the engine-rooms, and the injured being cared for, as far as possible, by what is left, if any, of the medical department of the ship, which has shared the dangers of all else in this slaughter pen. To such the hospital ship is as an oasis in a desert, a haven where there was no hope. The picture is not too strong, but truly outlines what has been taught by most recent wars.

Shortly after the Russo-Japanese War, the eminent Surgeon-General Suzuki, of the Imperial Japanese Navy, presented the President of the United States with a case containing samples of the missiles which were extracted from the bodies of the injured in the battle of the Sea of Japan. The President kindly turned this case of chunks of metal, inconceivable in shape, over to the Naval Medical School, where they are now on exhibition and for the instruction of the young men as they enter the service. Such possible conditions confronting us has impressed upon the Bureau of Medicine and Surgery the necessity for making every preparation and in time of peace to have at least one hospital ship on the Atlantic and one on the Pacific to accompany our fleets when cruising in squadron, and training the Medical Department at sea to be prepared for the emergencies of war.

We now have secured, after much trouble, the "Relief," a makeshift, which, as such, is doing such splendid work with our Atlantic fleet, that I feel assured that, when the history of her work is made

known on her return to this coast, she will have proved the necessity of a hospital ship in time of peace, and that her good work will not only perpetuate her own existence until better facilities are given us, but be the means of helping us to obtain other larger and better hospital ships which the increase in the navy and the separation of our possessions demand.

I know how specialism in medicine and surgery has grown in civil life, coincident with the enormous strides made in advanced medicine. No man now feels that his limited human capacity is equal to the task of perfecting himself in every branch of this science, and so, after years of struggle, we have come to feel that it is proper that such specialties as the eye, the ear, the various branches of surgery, bacteriology, laboratory work, etc., have been forced upon us.

The busy general practitioner feels that he must have the aid of the most expert microscopist or laboratory worker to carry on his work to the best interest of his patient and himself and does not hesitate to say so. So, in the navy, where the breadth of the field, as I have indicated, is so vast, we are being forced to take notice of increased and growing demands of the service, and, while every man is given an unusual and exceptional training in all that pertains to his work, yet we are forced more and more to make provision for men who show special and undoubted ability in certain lines, such as instructors, laboratory workers the eye, ability in hospital organization and construction, surgery, etc., etc. To some extent an officer can create such a demand for his services by showing special adaptation therefor and that he is able to pursue largely the special work that he has shown himself best qualified for. Thus, with the building and growth of the Naval Hospital for Tuberculosis, men such as Surgeon Wright are making, by their special skill, a reputation and demand for their services in this line. So, in tropical medicine, we have developed men like Surgeon Stitt, who, by his untiring years of work in this branch of medicine, stands to-day at the head of the profession in this work. So, also, is it the case with Medical Inspectors Beyer and Gatewood in hygiene, and I might mention many others who have either made themselves a permanent place in some branch of the navy work or who are rapidly doing so.

The spirit of the times has changed wonderfully among medical officers of the navy

in the past twenty years, who not only have the ability but all seem enthusiastic in their work. This spirit the bureau has tried to foster with apparently most excellent results.

With the provisions the bureau has been able to make to help these young men to meet the requirements of modern medicine, the service has become more attractive, and to-day we have less trouble than ever in securing the best men, professionally and socially, that the profession affords.

As a rule, medical officers are anxious to remain in the service and when, for any reason, one returns to civil life, it is with regret, and he is usually eager to embrace any opportunity to return.

I would impress upon you gentlemen that to-day the service affords as much for your young medical friends in the way of pay and satisfactory professional work as any other public service, and in many respects the career of the naval surgeon offers more that is attractive as a life career than is generally known in civil life.

In conclusion I wish to extend to you members of the Essex County Medical Society an invitation, when you are in Washington (where all of you go sooner or later) to visit our Naval Medical School and Hospital and see for yourselves how we are endeavoring to meet the requirements of the service and to provide every safeguard of health for those who are giving their lives to the naval service. There are to-day in this school thirty-nine young surgeons selected out of 150 graduates in medicine, who are going through with the practical preparation to specially fit them for service in the navy.

It has been a great pleasure for me to meet you, and I wish to express to you my appreciation of your cordial invitation to be present at this meeting.

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Deformities of the septum, enlarged turbinates, etc., should receive operative treatment only when they cause obstruction.—*American Journal of Surgery*.

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In overdistention of the bladder, due to prostatic disease, one should be careful not to empty the bladder too freely as paralysis of the bladder wall, as well as hemorrhage, might ensue. The patient is the best indicator of the amount to withdraw as he generally complains of cramp-like pain when too much urine is withdrawn. As a rule there is an accompanying congestion of the kidneys so that these patients may secrete from three to five quarts of urine a day.—*American Journal of Surgery*.



## SALPINGITIS\*

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According to Gray, the Fallopian tubes are four inches in length and extend from the superior angle of the uterus to the side of the pelvis. The canal of the tube is very small, and originates from the superior angle of the uterus by a small opening known as the ostium internal, which is so small that it will hardly admit a small bristle. It continues narrow along the inner half of the tube, and then gradually widens into a trumpet-shaped extremity, which becomes contracted at its termination. This orifice is called the ostium abdominale and communicates with the peritoneal cavity. Its margins are surrounded by a series of fringe-like processes termed fimbriae, and one of these processes is connected with the outer end of the ovary. To this end of the tube the term fimbriated extremity is applied.

**Structure.**—The Fallopian tube consists of three coats—serous, muscular and mucous. The external or serous coat is derived from the peritoneum. The middle-muscular-coat consists of an external longitudinal and an internal layer of muscular fibres continuous with that of the uterus. The internal or mucous coat is continuous with that of the uterus and at the free extremity of the tube with the peritoneum.

It is thrown into longitudinal folds in the outer part of the tube, which indicates its adaptation for dilatation, and is covered by columnar ciliated epithelium. This form of epithelium is found also on the outer and inner surfaces of the fimbriae. The function of the ciliated epithelium is to carry the ovum down from the ovary to the uterus. When, as the result of the inflammatory changes, the cilia are destroyed, the impregnated ovum does not pass down into the uterus, we have a tubal pregnancy. It is probable that fecundation takes place in the Fallopian tubes, but the many instances of ovarian pregnancy would seem to indicate that it frequently takes place in the ovary. It probably takes a week for a fertilized ovum to find its way from

the fimbriated extremity of the uterus to the uterus in a healthy tube.

Inflammation of the Fallopian tubes is probably one of the most frequent disorders which the physician may be called upon to treat when practicing among women. It produces more suffering and is the cause of more invalidism than any other condition from which women suffer.

**Causes.**—Salpingitis in the large majority of cases is brought about by an extension of inflammation from the uterus, the mucous membrane of which is continuous with that of the Fallopian tube. Tubal inflammations are almost exclusively of infectious character due to microbic invasion. It is possible that an inflammation may arise from simple congestion from suppressed menstruation; if such is the case the affection is transient in character. Excessive sexual intercourse, exposure to cold, or violent exercise too close to the menstrual epoch, are mentioned as causes of simple catarrhal salpingitis. The bacteria which are concerned in the production of salpingitis are the streptococcus, the staphylococcus, the gonococcus, the tubercle bacillus, and in a few cases the bacillus coli communis. Frommel and Witte have found the pneumococcus in a case of puerperal salpingitis.

**Streptococcic Infection.**—This form of infection is introduced into the Fallopian tube in a variety of ways. The uterine sound has frequently been introduced into the cervix without first sterilizing the vagina, oftentimes the instrument itself being dirty. Women have introduced crochet needles, knitting needles, meat skewers, these making an abrasion in the cervical or vaginal mucous membrane. The stem pessary is responsible for a great deal of trouble in this respect. The hands of the accoucher are sometimes contaminated by coming in contact with septic material. He may take the precaution to wash his hands thoroughly before approaching a woman who is in labor, but germicides are unreliable, and the hand that the woman hopes to help her in her labor may carry to her the poison which may cause her death or make her an invalid for life. The non-gravid uterus will stand a considerable quantity of the streptococcus, but the uterus which has been recently emptied of its contents in labor or miscarriage is in a condition which is favorable to the growth of germ life, and it is in these cases that the greatest danger lies. The source of

\*Read before the Camden City Medical Society, October 2, 1908.

infection may be the uterine cavity (usually the site of placental implantation), a lacerated cervix, a lacerated perineum, or even an abrasion of the vagina or vulva. The route of invasion is generally by way of the lymphatic glands, and in consequence its manifestations are generally found in the distal extremity of the tubes, which are in direct line of the lymphatics, and for this reason it is generally attended with more general and earlier involvement of the surrounding structures than is gonorrheal infection. As the point of infection is either on one side or other of the pelvis, the tube on the affected side is always affected, thus streptococcic infection is generally unilateral. Streptococcic infection then is generally accompanied by a high fever, pronounced chill, great prostration, rapid pulse and all the symptoms of a grave infection.

**Gonococcic Infection.**—The large majority of tubal inflammatory conditions are due to the gonococcus. The mode of invasion is by a continuation of inflammation from an infected uterus. It is a fact that the gonococcus is found in but 20 per cent. of cases showing a gonorrheal history, but the gonococcus is an anaerobic germ, and does not live long in the closed Fallopian tube. The gonococcus will live for a long time in the vulvo-vaginal glands, in Skene's glands in the cervix, in the urethra or in the body of the uterus itself. Having found its way into the tube the gonococcus gives rise to its characteristic effects, which are intense inflammation and congestion. The inflammation is so extensive that it closes the ostium internal and the ostium abdominale, thus sealing both ends of the tube. The consequence is that sterility is the lot of the woman so afflicted. In gonococcic infection both tubes are generally involved. The constitutional symptoms are not so marked as in the preceding variety, but the patient is generally made sterile, and is probably an invalid for life unless she undergoes a serious operation, which jeopardizes her life and unsexes her for all time. At this time I think it is well to draw attention to the fact that the general practitioner has a great responsibility resting on his shoulders when he tells his male patients that they are in a fit condition to marry after having had gonorrhea. Many an innocent girl has found in her marriage bed the starting point of a life of invalidism, and the joy of maternity, which, I

think, is the greatest pleasure of a woman's existence, is denied her. The husband who infected her would in many instances rather lose his right arm than have injured his wife.

The bacillus coli communis is occasionally found, but always as the result of intestinal adhesions to the tube. In this case there is generally an accompanying appendicitis. In these cases it is difficult to tell whether the tubes or the appendix is the organ at fault. I saw recently a surgeon of large experience make a diagnosis of appendiceal abscess. On opening the abdomen it was found that the Fallopian tube of the right side was affected forming a tubo-ovarian abscess. The vermiform appendix was very slightly inflamed. The patient underwent a double salpingectomy, as well as an appendectomy. If the surgeon had known that it was tubal instead of appendiceal he would not have operated, as the outlook is very unfavorable in such cases.

#### **Tuberculosis of the Fallopian Tubes.**—

This is more frequent than that of any other portion of the genital tract. The infection may be primary or secondary. Primary infection probably comes most frequently by way of sexual intercourse, the germ being carried up the genital tract by extension from the uterus. It has also been carried in on the hands of the physician or his instruments. Secondary infection is much more frequently seen than primary, but it also travels a different route. The primary infection travels from below upward, while the secondary infection travels from above downward. Secondary infection generally occurs as the result of an extension of tubercular peritonitis.

**Symptoms and Course.**—Tubal tuberculosis is usually bilateral. The tube is very much like that of a salpingitis from any other cause. Often nodular masses of tubercular deposit are found projecting from the surface of the tube. These assume a bead-like appearance, and this condition is the so-called rosary shaped tube of Hegar. This is quite diagnostic of tubercular salpingitis and is found in no other condition. The fimbriated extremity is often closed and the tube filled with liquid, creamy or cheesy matter. In the primary form the inflammatory condition extends into the tube, and at the isthmus there is a shoulder-like enlargement, which is generally present in tubercular salpingi-



tis. The diagnosis is rarely made before operation. Many cases are taken for other inflammatory conditions and the diagnosis is made at operation. Given a case of tubal trouble of long duration, where the husband is tuberculous, it might be possible to make a diagnosis by finding the tubercle bacilli in the scrapings from the uterus. The natural tendency of this condition is to destroy life. There is no medicinal treatment which is of any benefit. Operation affords the only hope of cure. Even in the secondary salpingitis due to an extension from a tubercular peritonitis, there is always considerable benefit from opening the abdomen. In the primary form removal of the tube is followed by recovery. Salpingitis occurs under two forms, the catarrhal and the interstitial.

Catarrhal salpingitis is an inflammatory condition confined to the mucous membrane of the tube. It is transient in character and of mild grade. In interstitial salpingitis the mucous membrane, the muscular coat and often the serous coat are involved in the inflammatory process. That portion of the tube which runs through the broad ligament does not lengthen out like the rest of the tube, and the consequence is that in the majority of the cases the tube is twisted on itself, and the ovary is included in the angle of deflection. In the streptococcic variety the brunt of the attack seems to be in the distal end of the tube, and as a consequence we have the tube falling back into the cul de sac, and can generally be felt as a dense hard mass behind the uterus. The gonococcic variety is generally accompanied by a greater uniformity in the course of the tube and, as a general rule, the latter variety is not accompanied by any mass in the cul de sac. The tubes curl up very much in the shape of a bologna sausage.

The ultimate effect upon the tube is generally guided by the variety of the inflammation. A mild grade of inflammation will probably be followed by complete resolution. Again, resolution may be more or less incomplete and leave the tube crippled as the result of the attack. When the attack is severe there is generally pus in the canal as well as in the interstices of the tube. In many instances the infectious material will have found its way into the peritoneal cavity, either through the ostium abdominale or through the walls of the tube itself. This excites a localized

peritonitis with the exudation of plastic material, which results in walling off the cavity from the general peritoneum. Sometimes the amount of pus is so great, or the walling off process is inadequate, and we then have a general peritonitis. In many instances the ostium abdominale becomes closed and we have the condition known as pyosalpinx.

**Pyosalpinx** — This condition is brought about as described above. In the acute stage the pus is exceedingly virulent, and if it should happen that the tube breaks and floods the peritoneal cavity, the results are often fatal. I had this accident occur last year. I had a patient etherized for a vaginal drainage. An assistant made an examination and while doing so ruptured the sac. The patient immediately went into collapse. I opened up the cul de sac immediately and evacuated a large quantity of pus. She was taken off the table in extreme shock and died in a few hours, although when she went on the table her pulse was good and she had had very little fever. If the pus does not find its way through the tube in the large majority of cases it becomes sterile. It takes about six weeks for an acute inflammatory case to lose its virulence. In a number of cases the tube goes on to complete recovery, but this is the exception rather than the rule. The great majority of women who have pus tubes are semi-invalids. At times they are able to get around and attend to their household duties, then again they are laid up for weeks at a time. This condition continues with varying degrees of intensity until the menopause, when with the general atrophy of the parts incident to that period the Fallopian tubes shrivel up and whatever secretions they contain will be absorbed.

**Hydrosalpinx.** — There are several theories as to the causation of this condition. The first teaching was to the effect that all inflammatory conditions of the tubes were originally of this variety, and as time passed along the contents of the tube became purulent. The later theory is that hydrosalpinx is a later stage of pyosalpinx, because the solid constituents of the pus are thrown out of solution and adhere to the inner surface of the tube, thus leaving only the liquid portion of the tubal contents. The tubal walls are thin and transparent, the mucous membrane is atrophied and entirely destroyed, and if the tube ruptures it may shrivel up and be-

come a fibrous cord. Occasionally there may be a slight opening in the uterine end of the tube and there may be an intermittent discharge into the uterus.

**Hematosalpinx.**—When the tube is distended with blood the condition is known as hematosalpinx. This condition is brought about as the result of a hemorrhage into a hydrosalpinx or a pyosalpinx. It may be due to direct violence or torsion occurring in some portion of the tube. The blood in these cases remains fluid, or it may thicken and become an organized clot. Hematosalpinx is a rare affection.

**Symptoms.**—The symptoms of salpingitis are very varied. In the acute condition we have first of all pain, which is often very severe. The pain is in the lower part of the pelvis. The patients can generally locate on which side the pain is most severe. Sometimes only one side is affected, sometimes both. Occasionally the pain runs down along the thigh of the affected side. There is considerable distension of the abdomen, in the majority of cases due to a parietic condition of the bowel. Often the tympanites is so great as to interfere with the respiration. Fever is generally present to a greater or less degree and often assumes a remittent type, simulating malaria. The fever continues so long as the tubes are in a state of acute inflammation, lasting frequently a month or six weeks. There are irregular chills, generally in the beginning of the illness, often accompanied by exhaustive sweats. At times menstruation is delayed, again the attack is accompanied with menorrhagia. Constipation is generally present, and frequently the bladder is pressed upon by the inflammatory swelling to such an extent that micturition is interfered with. There is a rise of pulse and temperature rate commensurate with the height of the fever. When pus forms the fever is generally higher. The pus is generally confined to the tube, which generally, by its own weight, is carried down into Douglass's pouch. If there is a marked ante-flexion of the uterus the tubes have a tendency to bend forward, and then we have an interference with the functions of the bladder. If left to themselves these cases frequently rupture into the bowel or bladder. If the abscess empties into the bladder there is generally a marked cystitis set up, which causes the patient much discomfort and prolongs the convalescence. If the abscess empties into the rectum the

condition of the patient immediately improves, the temperature drops, the pain is relieved and, from a condition of extreme suffering, the patient passes into one of comparative comfort. If the tube leaks into the peritoneal cavity there are generally protecting bands of adhesions thrown out which wall off the abscess. If the tube bursts suddenly and floods the abdominal cavity general peritonitis develops. On the other hand, the pus may remain in the tube for some time and finally become sterile. The subsequent history of such cases is that they partially recover their health, only to be subjected to repeated attacks on the slightest provocation. The patients who survive an attack of this character are generally sterile. It is not always safe for the physician to say that a woman will or will not bear children after one of these attacks. To illustrate, a woman suffered from salpingitis brought about by a miscarriage. She had had a number of attacks of pelvic inflammation, and was a semi-invalid. I did not think her condition indicated an operation at the time, and was subjecting her to medicinal treatment which I thought was indicated. While visiting in Philadelphia she was seized with another attack of pelvic inflammation. A gynecologist was called in. He is a man of large experience, and one for whom I have a great amount of respect. He told her that she would never get well, that her tubes were incurably diseased, that it would be impossible for her to bear children, and that her only salvation was to have her tubes removed. The husband came back to me in high dudgeon. He said I had been treating his wife for several months, that he had paid out considerable money and that after all his wife would be forced to go under an operation. The woman did not go under operation, and since that time has borne a healthy child. She is to-day in good health, one tube having undergone resolution and the other is probably an impervious cord.

Those cases in which the pus ruptures into the bowel are probably the most favorable. I have in mind a case which came under my observation ten years ago. The woman had suffered from repeated attacks of pelvic inflammation, and was for a number of years in a state of semi-invalidism. In the last attack the abscess ruptured into the bowel. The relief was immediate, and since that time she has been in good health, although she has borne no more children.



**Diagnosis.**—In this as in all other conditions the taking of a proper history is exceedingly important. When called to see a woman suffering from fever and pelvic pain, the first thing is to find out if the patient has had a suspicious discharge which would indicate the presence of gonorrhea. If such is the case it is a simple matter to make a smear and examine for the gonococcus. If there is a history of a miscarriage or recent confinement in which the patient suffered from fever it will lead to the conclusion that there is some inflammatory condition of the pelvic organs. If we go into the history carefully it is generally possible to throw some light on the case. If the woman has missed a menstrual period, by careful questioning we will often find that she has in some way tried to bring on her menstruation, the many expedients women resort to for this purpose being familiar to all of us. I think in the early stage we have to depend largely on the history as bimanual palpation is very unsatisfactory, owing to the exquisite tenderness of the parts. If the patient is put under ether we have her under our control and can better outline the tubes and ovaries, yet I doubt if it is a safe procedure to use ether, as the examiner, knowing that the patient is insensible to pain, may use more force than he is aware of and have the harrowing experience the writer had which was mentioned in the early part of the paper. However, a great deal can be learned by palpating along the course of the tubes. A tube which is exceedingly painful is generally the seat of acute inflammation. If there is a marked bulging in the posterior cul de sac it is either a prolapsed tube, enlarged ovary or a retroflexed uterus. It is often difficult to differentiate between a retroflexion and a collection of pus in the cul de sac. By placing the patient in the knee-chest position the uterus will fall forward if there are no adhesions. If we can feel the fundus through the abdominal wall it is proof that we are not dealing with a retroflexion. Again a collection of pus in Douglass's pouch is generally very dense and hard. We can often feel the mass pit on pressure. Some operators of experience recommend the use of a trocar for exploration puncture. Others condemn its use, claiming that it is not policy to plunge an instrument into a structure the contents of which you are ignorant, fearing that should the contents not be pus they might cause an infection by pushing

the trocar through an infected vagina into the peritoneal cavity. Rectal examination is often more valuable than bimanual in these conditions, as it is often possible to palpate the tube through the rectum. In case of acute inflammation of the pelvic organs there is generally a leucocytosis present. I have seen right-sided salpingitis confounded with appendicitis. I have seen salpingitis frequently mistaken for typhoid fever. There is often a condition resembling typhoid fever in this disease. The coated tongue, high fever, headache, meteorism and digestive disturbances are likely to lead a man astray, especially if there is a right-sided salpingitis present. The most reliable guide is the leucocytic count. In typhoid fever the white cells are always decreased, while in an inflammatory pelvic case they are invariably increased. I have already mentioned appendicitis as a malady simulating salpingitis, and I have seen quite a number of cases where both conditions were present in the same individual. I think in a case of that kind it is good policy to wait until a tumor forms in the appendiceal region, when the abscess cavity can be opened and drained. The differential diagnosis between salpingitis and uncomplicated appendicitis would be decided largely by the history, looking for the history of gonorrhea or puerperal infection on the one hand, and constipation and digestive disturbances on the other.

I have seen a case of salpingitis taken for one of ectopic gestation a number of times. The history of the patient from whom this specimen (which was exhibited) was taken will illustrate how easy it is to be mistaken. I saw this lady early on the morning of July 1st of this year. She had been a sufferer from tubal trouble for a number of years. The slightest exertion was likely to bring on an attack. Exposure to cold, standing on her feet for any length of time, sweeping or running her sewing machine, was likely to precipitate an attack. Her menstruation had been regular according to her account. She often menstruated twice a month and as often she would go five weeks. In other words, in her case we could not elicit the classic missed period which is dwelt upon as pathognomonic of ectopic gestation. She had violent pain, nausea and attacks of syncope at this visit. There was no sign of menstruation. Vaginal examination revealed an enlargement of the left tube, which was very tender and painful.

Her temperature was normal. The next day she was much better. She continued to improve for several days. On the fifth day of her illness she began to flood, and a piece of tissue was passed from the vagina which I took to be an afterbirth. After this passed away the bleeding stopped, the pain was relieved and she said she felt all right. On examining the tube, the mass was found to be much smaller. The woman went on with her household work with instructions to call on me in two weeks' time. At the expiration of that time I saw her again and found the tube as large as an egg, quite painful and tender. She had some fever at the time. It was thought at first that she was suffering from a pus tube. A leucocytic count was made. The leucocytes were found below normal and I decided to operate, with the belief that the case was one of tubal pregnancy. The result proved the correctness of the supposition. A patient suffering from pulmonary tuberculosis or tubercular peritonitis presenting symptoms referable to the Fallopian tubes should be kept under observation, and if the condition remains stationary or the tubes enlarge gradually without much inflammatory reaction it is probable that the case is one of tuberculous salpingitis.

**Prognosis.**—The prognosis with regard to life is favorable in gonococcic and streptococcic salpingitis. In the tuberculous variety the patient suffering from salpingitis will surely fall a victim to the ravages of the disease unless she is subjected to operation. The prognosis is remarkably good. With modern treatment of tuberculosis many of the patients get over the disease, and when the tubes are extirpated there seems little likelihood of the disease extending and attacking contiguous structures. In the gonococcic variety, the prognosis with regard to future fertility is bad. I think that the most of women who have suffered an attack of gonorrheal salpingitis are sterile for all time. This is a source of great sorrow to many women. An all-wise Providence looks after these things. While it is a source of disappointment to many married women, it is a blessing in disguise to humanity. This is the reason that prostitutes do not bear children. If such were not the case how many poor little creatures would be born into this world with a heritage of woe. How many blind paupers, how many children with a parentage soaked in crime. What could be expected from the off-

spring of a mother so dead to all the instincts of womanhood that she would sell her body and soul for enough money to buy liquor to make her forget for a time her terrible existence?

In the streptococcic variety one side generally is involved. This remains a source of trouble for an indefinite period, sometimes emptying itself by way of the rectum or bladder, sometimes becoming absorbed and leaving the tube crippled. The opposite tube is generally healthy and pregnancy occurs in this variety by way of the sound tube.

**Treatment**—In the first place it is the duty of the physician to see that his hands are surgically clean before he attends a woman in labor or miscarriage. The only way to do this is to develop the aseptic conscience, by which I mean that a physician should never allow his hands to become contaminated with septic material.

I would discourage all intrauterine applications in office work. I have under observation to-day a woman who has just passed through a severe attack of salpingitis brought about after the introduction of a pledget of cotton soaked with iodine on a uterine sound. She has now a pus tube on one side and is likely to be more or less of an invalid until it is removed. The next thing I wish to draw your attention to is the necessity of good coaptation in repairing the perineum after labor. A raw surface in the vagina is a menace to a woman's life. It is often through these raw surfaces that the infection is carried up through the lymphatics to the outer surfaces of the tube. In sewing up the perineum I have found it safest to use silk-worm gut, having boiled it along with the needles, thumb forceps and scissors while waiting for the patient to be confined. Keep the instruments, needles and sutures in the boiled water until ready for use. I have seen two cases of puerperal fever in which chromicized catgut was used. From the same bottle catgut was used to repair a scalp wound, which was followed by supuration. Since that time I have used the silk-worm gut, sterilized as above described.

With regard to the prophylaxis of the gonococcic variety it is generally the fault of the husband that the woman becomes so infected. Many a young man thinks he is well of his gonorrhea. He may wait for six months or a year after he has been cured of his discharge before marriage, yet the excitement incidental to the first



few nights of married life brings about a return of his urethral discharge, and he infects the woman he has sworn to love and cherish. I have at present a young woman under my care. At her marriage two years ago she was a beautiful girl, enjoying the most perfect health. Previous to their marriage the husband had had an attack of gonorrhea. He underwent treatment for several months until every sign of the disease was apparently eradicated. Within a week after his marriage the disease returned. His wife became pregnant almost immediately and at the same time developed gonorrhea. Her child was born and lived but a short time. She suffered from uterine and tubal gonorrhea. She now has a bilateral salpingitis, and in the wan, gaunt woman of to-day it would be impossible to recognize the beautiful girl of two years ago. Her tubes are irremediably diseased, and it is more than likely she will have no comfort in life until they are removed. I think it would be a wise provision if we had a law in this State requiring a physical examination before a man could get a license to marry.

In the acute stage of salpingitis it is imperative that the patient should be put to bed. A salt solution will unload the rectum and add to her comfort. Saline purgatives relieve the congestion and tend to reduce the abdominal distension. An ice bag over the site of the pain will often soothe the patient to such an extent that we can do away with opiates. If there is no evidence of a mass in the pelvis hot vaginal douches are comforting to the patient and tend to reduce the inflammation. If there is any evidence of pus formation I would suggest that they should be avoided unless given by the doctor himself, as it is quite likely that an inexperienced nurse might rupture a pus collection in her manipulations. The patient should have a restricted diet; it is highly important that she should not take any food which would be likely to upset her digestion, as a case of impaction coming on during an acute attack of salpingitis would add to her sufferings and materially alter the prognosis. Basham's mixture is useful. It acts as a febrifuge, a diuretic and tonic, and is especially useful in the anemia which accompanies this condition. I desire to draw the attention of the gentlemen present to the prevalent custom of gynecologists and general practitioners of giving strychnine in almost poisonous doses during an attack of pelvic inflammation. I know it is

very popular, but I cannot see where it is indicated. It seems to me that strychnine is like the whip that is applied to the jaded horse. It stimulates the heart for the time, only to have it flag later on, when bolder stimulation has to be used. I have seen this stimulation carried on until the patient was thrown into convulsions. If strychnine is used I would suggest that it be withheld until the patient really requires stimulation, and not earlier, as a routine measure. A moderate amount of quinine is useful as a tonic and febrifuge, but large doses are productive of great discomfort, and I have never seen any benefit from the larger doses. Sponge baths of alcohol are grateful and induce sleep, but have little effect on the temperature. If the patient is not doctored too much by the internist and the surgeon is held in check, the large majority of pelvic inflammations will get well of their own accord. I am now speaking of the acute condition. When the patient has recovered from her illness, which in the majority of cases will be in the course of two to six weeks, she has sore tubes and is more or less incapacitated for work. At this time I have seen very good results from tampons of boroglyceride, ichthyol, etc. The inflammation is relieved by the application to the fornices of pure tincture of iodine. The clay poultice applied at night is often followed by a great deal of relief. The use of the vaginal douche and colonic irrigation with the rectal tube add to the comfort of the patient.

**Surgical Treatment.**—Should there be a collection of pus in the posterior cul de sac, the proper method of procedure is to evacuate it at once. In the puerperal variety I wish to take exception to the prevalent custom of curetting the uterus with a sharp curette. The majority of the cases of puerperal fever I have seen have had a torn perineum, a lacerated cervix, or a raw surface in genital tract. Infection has been carried up through the lymphatics, and eventually there is a mass on one side or the other of the uterus. By curetting the uterus we open up fresh channels of infection. There can be no possible good gained from such a procedure.

By examining the placenta there is no difficulty in ascertaining whether it has been torn. If we find that such is the case, and we believe the uterus contains placental tissue, the proper procedure is to give the patient ether and remove the fragments with the hand. I think that

is the safest curette. Shortly after I graduated I heard a young man who was in my class say that he had received a puerperal fever case into one of the Philadelphia hospitals. The woman had a temperature of 105 degrees on admission. He curetted her four times that day, and in spite of all this she died. In the puerperal variety it is well to give one intra-uterine douche and then leave the uterus alone. I think the most of the patients will get well if they are not tampered with too much.

In acute inflammatory conditions it is very bad policy to open the abdomen. I think it is good treatment to hold an inflammatory case for at least two months after the temperature has dropped to normal. If at the end of that time there is pus in the tube it has had time to lose its virulence, and any operative measures can be carried on with greater security. Again it is quite possible that resolution may go on to such an extent in an inflamed tube that it will not be necessary to operate. If in spite of intelligent care the patient has repeated attacks of pelvic inflammation, and her life is made miserable thereby, I think it is the proper thing to open the abdomen. If one side is involved the offending structure should be removed. If both sides are diseased I would unhesitatingly suggest the removal of the tube and the uterus as well. I have seen some of these inflammatory cases in which the womb was so badly diseased that you could push your finger through its walls. The mortality from the operation is not any greater than that from double salpingectomy, and the patients convalesce much sooner than in the former operation. I have seen a large number of women treated by both methods, and have found the subsequent morbidity much less in the hysterectomies than in the double salpingectomies.

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Lipoma of the scalp may also simulate a wen. Both grow gradually, are semi-fluctuating and are movable on the deeper parts. Aspiration for diagnostic purposes is not a wise procedure; for if the tumor be a cyst, the contents may readily flow out through a puncture hole, making it difficult to remove the cyst wall at operation.—*American Journal of Surgery*.

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Lipomata of the scalp often undergo cystic degeneration. A tumor which grossly may look like a lipoma, may show under the microscope evidences of sarcoma. Fortunately these sarcomata of the scalp do not often form metastases.—*American Journal of Surgery*.

## THE DIAGNOSIS AND TREATMENT OF SARCOMATA\*

By Joseph Tomlinson, M. D.,  
Bridgeton, N. J.

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When asked, a short time ago, to read a paper at this meeting, I was somewhat at a loss for a subject. The difficulty lay, partly in the multiplicity of subjects which naturally present themselves to an active worker in the field of medicine and surgery, partly to the scant time allowed for thorough preparation. Nevertheless, I appreciate very much the honor and privilege of addressing so active and earnest a body of men as is represented here, and have chosen a subject which happens to be of special interest to me at present, and which cannot fail to forcibly appeal to any practitioner of experience, namely, the diagnosis and treatment of sarcomata.

Any attempt, on my part, at an elaborate or exhaustive discussion of this topic would be presumptuous. Such a discussion would involve such technical knowledge as is possessed only by the expert pathologist and most experienced clinician. I merely wish, in this brief paper, to emphasize some practical and salient aspects of the subject as they have presented themselves to me in some personal experiences with sarcomatous cases. The rapid course of this form of neoplasm, its proneness to dissemination, its tendency to recur, and its great fatality, render accurate diagnosis, reliable prognosis, and prompt treatment of the most vital importance.

To be thoroughly alert as to the location, appearance and history of a sarcomatous growth, requires at least a general knowledge of its structure and mode of development. Pathologists tell us that sarcoma is a malignant tumor-disease of connective tissue, and may develop wherever connective tissue exists; that when viscera, such as the liver and kidneys or glands, such as the mammary or prostate, are invaded, such invasion begins in the connective tissue of the capsule of the organ or gland. So in sarcoma affecting muscular tissue, the growth begins primarily in the muscular sheath or intermuscular septum.

It is not within the province of this pa-

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\*Read before the Tri-County Medical Society of South Jersey, October 27, 1908.



per to consider the cytology of these growths. But I will recall to your minds the classification, familiar to you all, based on the shape of their cells and their distribution, namely, the round-cell sarcoma, the spindle-cell sarcoma, the myeloid or giant cell sarcoma, the lympho-sarcoma, the alveolar sarcoma, osteo-sarcoma, chondro-sarcoma, angio-sarcoma, melano-sarcoma, endothelioma, and cylindroma, Sarcomas, as a rule, have no capsule, and the vascular supply varies within wide limits. The blood supply is usually capillary in character, circulating through vessels without distinct walls. This characteristic is almost uniformly found in the centre of the growths, while near the periphery and about them, may be found large vessels. This feature of the blood supply has a pertinent bearing on the frequency of hemorrhage in and about sarcomas.

The method of dissemination of these growths is a point of importance in diagnosis. Dissemination is mainly along the veins. By them are carried as emboli the small and easily detached fragments. These emboli pass to the right side of the heart, thence to the lungs. Here, consequently, secondary growths are most frequently found. It should be borne in mind, however, that in areas opening into the portal vein, the liver rather than the lungs, will be the site of secondary infection. Dissemination, according to some authorities, does, however, occur at times by means of the lymphatic system. Secondary changes and degenerations are common in sarcoma. These may result from hemorrhage, cystic degeneration, calcification, or in growths projecting upon the surface, or into the open cavities of the body, and ulceration.

Sarcoma may occur at any age from infancy to extreme senility, and has a predilection for the connective tissue of the extremities. When bones are affected, the femur is the favorite site. The character of the swelling varies with the type of the disease. It may be hard, of medium consistence, or soft enough to resemble an abscess.

In the diagnosis of sarcoma, it can be safely said that the most constant and characteristic feature is rapidity of development. By this, I do not mean alone rapidity as measured by weeks or even days, but an apparent instantaneous de-

velopment. Two cases that I can now recall, forcibly illustrate this point. One of them was in a girl of sixteen years. While rapidly walking uphill, she felt a sudden pain in the region of the left popliteal space. On examination, a small tumor was found, which proved to be a sarcoma. Amputation was promptly resorted to, and she is alive and well to-day, at the age of twenty-six years, ten years after operation.

The other case was a man of sixty-five. While doing some sort of mechanical work he was struck with a tool just above, and in front of, the elbow joint. A tumor instantly developed. This also proved to be a sarcoma. Amputation was performed, and, as yet—after a lapse of two years—there has been no recurrence. The explanation of such cases undoubtedly lies in the occurrence of a hemorrhage in a vascular sarcoma so small as to have escaped previous notice, a very slight traumatism being enough to cause a rupture of the fragile blood vessels.

The rapidity of growth is, however, amazing in many cases. I am now treating a case of recurrent sarcoma following operation, in which an intra-abdominal growth of this kind, starting from the left ovary of a girl of seventeen, grew from a mass, just large enough to be perceptible on abdominal palpation, to a tumor extending above the umbilicus, in seven weeks. I mention these cases merely to emphasize the importance of rapidity of growth as a diagnostic feature.

Age is an important consideration in diagnosis. As has been already stated, sarcoma may develop at any age, but is most frequent between the ages of twenty and fifty years. But any rapidly growing tumor in a child or young person should at once arouse suspicion. Pain is by no means a constant or diagnostic symptom. This is present in superficial ulcerating sarcomas, and where the location is such as to produce pressure. It is said to be more severe when the disease attacks the vertebra than in any other region.

There are several conditions with which sarcoma may be confounded, and from which it is to be differentiated. One of the most important of these is carcinoma. The differential diagnosis between sarcoma and carcinoma given by Parke is so concise and practical that I will quote it:

SARCOMA.	CARCINOMA.
Occurs at any age.	Rare before thirty.
Disseminates by blood vessels.	Disseminates by lymphatics.
Arises from mesoblastic structures.	Arises from glandular tissues,
Distant metastasis common.	Less so.
Less prone to ulceration.	More so.
Involvement of lymphatics not common.	Almost invariably, adjacent lymphatics are involved.
Secondary degenerations and changes common.	Degenerations not common. Other secondary changes rare.
Sugar present in blood.	Peptone present in blood.

With the utmost care, however, cases will not infrequently occur which lie so closely on the border line between these two neoplasms, as to make both the clinical and laboratory diagnosis a matter of the greatest difficulty. Sarcoma is also to be differentiated from tubercular, syphilitic and inflammatory swellings, from aneurism, and from muscular hernia. The history and symptoms, characteristic of each of these conditions, will, as a rule, make the diagnosis clear.

The treatment of sarcoma cannot be intelligently considered, without, at least, a passing reference to the etiology of the malignant growths. This is a most confusing subject to the non-expert in pathology and bacteriology. Without reference to the theories of the past, we are safe in making the statement that scientists are to-day divided into two groups on this question. In one group are the adherents of the parasitic theory. In the other group are found those who do not accept the parasitic theory, but believe malignant disease due to some altered condition of cells, independent of parasites. To us poor mortals of the non-expert type, who are patiently waiting for a solution of this problem by pathologic and bacteriologic investigation, Dr. J. Chalmers Da Costa very pertinently applies the speech of "Empedocles on Etna:"

"The gods laugh in their sleeve  
To watch man doubt and fear,  
Who knows not what to believe  
Since he sees nothing clear,  
And dares stamp nothing false, where he  
finds nothing sure."

The only sure thing in the whole controversy to guide us in the treatment of malignant growths is the proof of their local origin. Both the parasitic and the non-parasitic groups of theorists (if we call them such) are agreed that the affection is primarily local. If, therefore, the part affected were always accessible, if we could remove the part affected while the disease was yet entirely local, and if we could remove all of the affected part, we would have accomplished a cure. Unfortunately this condition of affairs rarely happens. The treatment of sarcoma is, therefore, based on the possibility and practicability of its removal.

It is customary, for this reason, to classify the cases into the operable and non-operable. In arriving at a decision upon this point, there are to be considered the age and general condition of the patient, the accessibility of the part, and the liability of recurrence. Recurrence is the rule in children and in certain anatomical locations. It is certainly not worth while to subject a patient to the anxiety, pain, discomfort, general annoyance and expense of an operation, if the disease is to return in a few weeks.

My experience with sarcomata of the breast has been so uniformly disappointing that it is with the greatest reluctance that I advise operation in any well-defined case of this character. Too often it happens that a woman so afflicted consults a surgeon, hopefully submits to operation, and returns to her family in the full belief that a cure has been effected. But soon her hopes are shattered. Then, gentlemen, you and I—general practitioners of medicine—are obliged to break to her the truth. It is for us to comfort her in her bitter disappointment. It is for us to relieve her as best we can, as she goes to her inevitable doom. It is for us to hear the opprobrium brought upon the science and art of surgery by such unfortunate cases. Meanwhile, perchance, the patient's name stands on the records of some great metropolitan hospital as discharged "improved," or "cured."

I am thoroughly convinced that if the plain, unvarnished facts, as we from sad experience know them, were submitted to every patient considering such an operation, there would be considerably fewer breast operations. There is a principle involved here. The observance of this principle is that which differentiates an intel-



ligent, conscientious surgeon from a mere operator. This may sound rather at variance with the teachings of the present day. But meetings, such as this, are, more or less, in the line of experience meetings, and an honest confession is sometimes good even at the risk of appearing unorthodox.

For the treatment of inoperable cases of sarcoma, various expedients have been introduced. The administration of thyroid extract, injections of alcohol, cutting off the blood supply by ligation of arteries, treatment by cataphoresis, liquid air, radium, the Finsen light, treatment by the mixed toxins of erysipelas and the bacillus prodigiosus, and X-ray therapy have all been tried with varying degrees of success by more or less enthusiastic advocates. Of all of these, the X-ray treatment is, I think, looked upon with the greatest favor by surgeons. Indeed, the majority of surgeons, as far as I am informed, uniformly follow the removal of superficial malignant growths by X-ray treatment as a precaution against their return. Dr. Newcomet, of Philadelphia, X-rayist to the Presbyterian and Oncological Hospitals, has kindly consented to discuss this phase of the subject, and his remarks will carry with them the weight of a broad experience.

At best, the treatment of sarcoma is most discouraging. The malignant neoplasms evidently require something more for their riddance than a mere lopping off. For the present, it means to labor and to wait. But a true soldier never abandons hope, and the followers of the banner with the red cross have never yet, in the history of medicine, been wanting in courageous perseverance.

Surgery, as a science, cannot be divorced from medicine, as a science, and the promise of the future lies in their mutual and inter-dependent development. There is to-day a stronger bond of sympathy than ever before between the surgeon and the laboratory workers, the pathologist, the bacteriologist, the physiologist, and the electro-therapeutist. The words of Dr. Robert T. Morris, of New York, in a paper read before the Section on Anatomy and Surgery, at the last meeting of the American Medical Association, are pertinent and suggestive. I will, in conclusion, quote the following from his paper:

"In the days of Hippocrates, surgery was heroic. That represents the first era. Then came Andreas Vesalius and

the anatomists, and we had the second or anatomic era in surgery. Pasteur and Lister introduced the third or pathologic era. The pathologic era is the one now prevailing the world over. The dominant idea is to prevent the development of bacteria in wounds, and to remove the products of infection by means of our art. \* \* \* \* Our faces are now turned toward Metchnikoff and Wright, with their descriptions of phagocytes and opsonins, and the natural protective resources of the patient. We are on the dawn of the fourth, or physiologic, era in surgery."

### CAN THE NATION BE PERPETUATED? NECESSITY FOR A NATIONAL BUREAU OR DEPARTMENT OF HEALTH.\*

Dowling Benjamin, M. D.,  
Camden, N. J.

That the nation shall be perpetuated is, doubtless, the hope and aim of every good citizen, and is taken for granted by every school boy that reads the history of his country. The perpetuity of "American institutions," the permanency of our nation are the themes and inspirations of every publicist and every Fourth of July orator; yet if it were really true that "the star-spangled banner forever shall wave o'er the land of the free and the home of the brave," it would be an exception to all rule and all the history of the world.

Yes, nations decay and pass away like individuals—youth, vigor, maturity, senility, death. Upon this all historians, ancient and modern alike, agree. As to what is the average life of a nation I will not attempt to be exact in stating, as we are dealing with principles rather than specific instances; but if it may be roughly stated as five hundred years, it is worth fighting for—certainly so, if it be a good nation. It is probably better for the world that some nations do die out.

The biography of a nation might be written something like this:

First Stage—Barbarous, ignorant, poor, vigorous, strong, healthy, natural.

Second Stage—Prolific, cunning, courageous, ambitious, energetic, studious.

\*Read before the Camden County Medical Society, Camden, N. J., December 8, 1908.

Third Stage—Enlightened, moral, industrious, powerful, successful, triumphant.

Fourth Stage—Comfortable, scientific, artistic.

Fifth Stage—Fashionable, luxurious, proud, frivolous.

Sixth Stage—Indolent, effeminate, vicious, inefficient, degenerate.

Seventh Stage—Immoral, defeat, decay, dissolution.

Seven stages of national life, and these stages seem to inevitably follow each other with the certainty of inexorable law; for there was never a time in the history of a nation when there were no prophets, sages, philosophers, patriots, nor statesmen to point out in due time and in forceful language the dangers mentioned above as the fifth and sixth stages.

Notwithstanding these warnings when the fifth stage arrived, these honest philosophers were ignored, and in the sixth these prophets were stoned. (In representative governments the stoning consists largely in leaving the names of such state-men off the slated lists of nominees for legislative or executive offices, consigning them to political death and otherwise discrediting and extinguishing the breed and its influence.) Did not Moses and Isaiah warn the Hebrews? Did not Socrates, Demosthenes and Solon warn the Greeks? Did not Cato, Cicero, Aurelius and Rienzi warn the Romans? Can the warnings of Washington, Webster or Roosevelt save us?

Notwithstanding these hard facts, in regard to the decay and passing of a nation, there is reason to believe that the life of a nation can be indefinitely prolonged by a proper study and elimination of the causes that underlie and bring about this decline and fall.

Admitting that our nation has entered already well into the fourth stage of its life as outlined above, I believe that its existence, vigor and prestige can be maintained at least equal, and probably superior, to any other so long as the human race finds this planet habitable. This is to be done only, of course, by studying and removing the causes which bring about the ruin and destruction of peoples and governments.

An examination into this subject reveals at once the fact that every student of history, every statesman admits that political corruption is the most potent factor in bringing about national degradation, decay and destruction, and accordingly the

and patriotic statesmen (reformers) are directed against political dishonesty, graft, spoils, bribery, filling of offices and Legislatures with tools, figure heads and agents of special interests. These efforts at reform are all right as far as they go. Some of these "reform waves" have done a great deal of good and if we have an abundance of them, the useful life of the republic will be prolonged to some extent; but the old "practical politicians"—the machine bosses and "regular" leaders, frankly tell us that "These reforms never last long. The men who kick are not men who make their living by politics, and won't stay on the job. Things will soon be as bad or worse than before," they say.

We must sadly admit that there is too much truth in what the "practical" politician says. Why? Because political corruption is not really the disease. It is only a symptom of the disease. The trouble lies deeper. Since a government of the people and by the people and based upon majority rule, cannot be better than the source of its power, morally and intellectually, it will not be better than the average of its citizens; and since the average is made up of individuals, of course, the welfare of the nation depends upon the individual and personal righteousness of each person in the community, which admits of the further proposition that if each person should adopt the "golden rule" or practice the teachings and moral philosophy of the Man of Nazareth, the life of the nation would necessarily be perpetuated, for this would eliminate the "EFFEMINATES" as well as the other classes of citizens mentioned in I. Corinthians 6: 8-10. There can be no question that every evil doer and dishonest man is necessarily an injury to his country (whether he be conscious or not of the fact), an enemy to his nation, shortening its life; an enemy to posterity as well as to himself. In other words we must secure MORALITY as one of the essentials of national longevity.

Yes, I know that sentiment is as "old as the hills" and quite as basic, but, after all, can we not build on it a little better? We must ACT upon it from a political standpoint. We do not realize its full meaning and have sadly neglected it in statecraft policy.

Now the other leg upon which a nation must stand is PHYSICAL HEALTH, which is quite as essential as the moral. In fact, one is useless without the other, and one



depends upon the other; "mens sana in corpore sano" is seventeen centuries old, but that doesn't hurt it. The simple conclusion is that the perpetuation of the life and power of a nation depends upon the preservation of the physical and moral health of its individual citizens. Yet we have not realized the possibilities that lie in national action.

The vast majority of the diseases from which we suffer are due to the habits of civilization and the only substantial offset to this is the development and application of the laws of hygiene and sanitation, and so far as the perpetuation of the race is concerned, the protection of the body social is more important than the altruistic sentiment of preserving the unfit through humanitarianism or medicine.

Among the principal factors or causes of the physical degeneration of a people, the following may be enumerated:

Propagation and transmission of hereditary, acquired and contagious diseases, deficiencies and characteristics that handicap inferior races; improper food, unhealthy occupations; too much or too little—and improperly balanced—physical and mental exercise (including child labor); influx or importation of people of inferior races or nationalities; intemperate use of stimulants (we drank over one billion, eight hundred millions of gallons of intoxicating liquors in the United States last year); narcotic drugs (we are pouring missionaries and millions of money into China in hope of "waking her up," while England, with force and arms, is keeping her asleep and indifferent under the narcotic and degrading influence of hundreds of tons of opium); unsanitary and unhygienic environments; oppression; prostitution and race suicide on the part of the better class of citizens. What I mean by "the best class" is men and women with ample and well-formed heads and cerebral convolutions, plenty of gray matter; efficient and normal organs of the special senses, good physique, good moral and intellectual traits. Such may be found in all nationalities and are very common in our Anglo-Saxon element. These are desirable citizens, in fact, essential to a great nation. They "make good" at anything—good mechanics, laborers, specialists, business or professional or general workers, good politicians and invincible soldiers. A handful of such won at Marathon and Salamis.

In a nation like ours, especially, these people generally become the property holders and the well-to-do; then, of all the people, the worst to practice such a thing, they begin to curtail offspring, so the breed begins to die out. The last two causes are no doubt among the most important and serious of all, yet they seem to receive the least attention and since they are within the scope of the subject they need to be especially emphasized.

I brought this subject up once in a large medical society, for the purpose of ascertaining to what extent foeticide was being practised. Among the replies to my questions there came from one of the leading professors in America on the diseases of women, the statement, that "over eighty per cent. of legitimate unborn among the middle classes were wilfully destroyed in utero by the parents." There was no dissent from that view in the society.

In order to understand the transcendent importance of this from the standpoint of national existence alone, we must consider the fact that it takes an average of four children to a family to keep a race in statu quo. That is, it will neither diminish nor increase in numbers if the average is four: because it is a well-known fact that half of the children die before puberty. It must be clear to every intelligent person that this situation absolutely dooms our nation to degeneration and decay.

Then in regard to prostitution (which also has a certain relation to the above) no nation can expect to live that either fosters or ignores this institution (for that is what it amounts to in these days); nor should it live. The choicest flower and fruit of civilization and human progress is the HOME and FAMILY. The very vitals of national life. Prostitution is their most deadly enemy. Yet in one city to-day, of a so-called Christian nation, there are forty thousand licensed prostitutes, flourishing and dissipating on the proceeds of their "business"—a vast army of women in the nation removed from their proper and normal position and functions of wife, mother and home-maker. Its profound importance, as affecting the State, may be partly comprehended, when we consider that for the support of this army of degradation there is required half a million of men as patrons—a majority of the male population.

All this valuable time and energy, and millions of dollars diverted from the sun-

port of home and family, and poured into houses that are veritable "Gates of Hell," where whatsoever things that are pure or of good repute; every suggestion of truth, honor, right, is at once a target for furious and malignant attack; foci of bodily and mental disease, where every vice is cultivated with the energy of desperation and all corruption of person and State stimulated to the full, and whose inmates later burden our almshouses and hospitals; compelling polygamous Asia to point with horror and shame to this baleful institution as "Christendom's dreadful substitute."

Let us lay aside our hypocritical airs, and effectually condemn the "modesty" that tolerates the reality of vice rather than mention it. The way we are going it will take a thousand years before we reach common sense and much longer to reach enlightened civilization.

What good has the "ignoring" policy ever done or the cowardly "can't do anything" talk? They encourage the evil. This policy has invariably fostered its growth to such proportions as to lead to the conclusion that it is a necessary evil and to its protection and its legal recognition as it is to-day in Europe and some cities in America. And O! innocent and young wives, observe! An army of women (and men in greater numbers) engaged in spreading disease, that, according to one of your most respected authorities, results:

First, in the lifelong invalidism or the surgical mutilation of thousands of women.

Second, the deaths of untold thousands of unborn or new-born infants.

Third, the lifelong taint of disease upon children who live.

Fourth, the blindness of over 60 out of every 100 new-born blind babies.

Fifth, the domestic unhappiness of tens of thousands of homes because of the absence of children, and, let me add, while admitting the unassailable truth of these results, a

Sixth, The unhappiness of hundreds of thousands of homes because of the destruction of healthy normal wifehood, by the same cause, producing a condition in society, that "takes off the roses from the fair forehead of innocent love and sets a blister there."

Do you believe, intelligent citizen, that the government should do nothing to mitigate these evils, the worst foes of its existence?

The Ladies' Home Journal (encourag-

ing sign), like the voice of one crying in the wilderness, exclaims, "Parents instruct your children." But who, I ask, is to instruct the parents? What kind of a conscience have the millions of women who have shouted from "shore to shore" and petitioned Congress against a man suspected of Mormonism, and yet never raised a hand against the terrible temptations in gorgeous array that beset their husbands and children on every street corner. What consistency of reasoning!

Necessary as a great army and navy may be; necessary as the conserving of our mineral and vegetable resources may be; vigorous physical, intellectual and moral health is, after all, the *sine qua non*, the fundamental consideration.

It was not for want of wealth, commercial success, literary taste, refinement, nor for want of a vast and well-equipped army and navy, that Persia failed to win at Marathon and Salamis; that her great empire fell at Arbela; that Greece, her conqueror, and Rome and Spain eventually failed. It was because of the physical and moral degeneration of the people, the men behind the swords and guns. Military science proved useless to a degenerate and enervated people.

The Isthmus of Panama had defied for ages all the mechanical sciences of the greatest nations of the world. Their wealth, their armies and navies were alike helpless to open a gate for the world's commerce. Over the forbidden zone the spectre of certain death held absolute sway, and laughed to scorn the glory of the nations. And the greatest achievement of our proud nation had to wait until the quiet and unpretentious PHYSICIAN, armed only with his microscope, his chemicals and laboratory of hygiene, fearlessly invaded this region of death, and, protected by his polished shield of pathological science, slew the horrid Gorgan of disease and *made possible* the GREATEST ACHIEVEMENT OF OUR COUNTRY AND OF THE WORLD'S HISTORY.

In view of the truth and importance of these facts what can we do to perpetuate our nation and its institutions?

Evidently the solution of the subject must be based upon the logical conclusions and principles to be deduced from the analysis of the causes of decay.

Strange as it may seem, unfortunate as it is, the health and hygiene, the physical and moral welfare of the nation has never



been deemed by our Congress of sufficient importance to call for the establishment of a national department or bureau for the purpose of taking care of these great essentials of national existence and welfare. Yet by such a department alone can we expect to perpetuate to any remote future the power and prestige and maximum efficient operation of the institutions of our great Republic.

We have national departments of war, of navy, of commerce, of treasury, of post-office, of interior, but none of health. What little is done on this line by the government is broken and disturbed as minor and subordinate functions of various departments such as supervision of immigration, pure food, marine hospital, surgeon-general's department, and so on, making it impossible to have any adequate and comprehensive management of this transcendent interest.

The establishment of such a department or bureau by Congress is greatly needed. The American Medical Association, representing virtually the whole profession, over 100,000, has already endorsed the proposition. President Roosevelt himself has told me that he is heartily in favor of it. Why, then, cannot something be done soon in this important matter?

It has not been so long since Mississippi and Louisiana were about to go to war with each other to prevent the spread of yellow fever. The plague is threatening, tuberculosis and other preventable diseases are carrying off hundreds of thousands of our best citizens. Our streams are being polluted; our waters poisoned.

If sheep become diseased the Agricultural Department of the government will send elaborate instructions what to do. But "of the people living to-day over eight millions will die of tuberculosis and the Federal Government does not raise a hand to help them."

We have a National Public Health Association, and an Anti-Tuberculosis Association, and other great bodies that study these matters, but have no authority. All the vast and invaluable work and garnered treasures of this army of harvesters are, to a great extent, nullified and lost because there is no national department with authority, proper organization and equipment, to turn this material into precious fruit for the preservation of the nation.

Such a department would place us in advance of any other nation. Its influence

for good would be felt at once. Its functions far-reaching, would in a few years do incalculable good. It is the only kind of a department that would enable us to efficiently handle the causes of national decay and certainly offers the best hope of securing national longevity and power.

There is little incentive to patriotism, or self-sacrifice, if no reasonable and efficient measures are to be taken to prevent this magnificent domain becoming simply the property and heritage of a degenerate and feeble race.

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## THE MEDICAL PROFESSION AND THE SOCIETIES

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D. E. English, M. D., Millburn, N. J.

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There are in the State of New Jersey about 2,600 licensed physicians. Of these about 1,312 belong to their county and the State medical societies, and about 700 belong to the national society. This is not as it should be. Some of the non-members are not eligible to membership, but a large majority is eligible.

There are five societies to which every physician in good standing in the State of New Jersey should belong. It is the privilege and the duty of every physician to be a member of these societies. They are, his county society, the Medical Society of New Jersey, the American Medical Association, the New Jersey Sanitary Association, and the Society for the Relief of Widows and Orphans of Medical Men of New Jersey.

The county society is the primal unit of all organization in the medical profession in the United States. It is necessary to belong first to the county society before these other things can be added unto you. To belong to your county society means to be recognized as a physician in good standing; it means to belong to a fraternity of physicians who are willing to help each other, not only in time of trouble, but in daily work; it means to be on good terms with your brother physicians; not antagonistic rivals in business, but co-workers in a liberal profession. It prevents petty jealousies, mean rivalry, unkind remarks; it promotes true ethics, and aids the profession at large in its great work of prolonging the lives, relieving the suffering and alleviating the miseries of mankind.

Membership in the county society carries with it membership in the State society, and the member receives the State Journal. To belong to these two societies, and to attend their meetings, is to rub one intellect against another and so enhance the brightness of both. It is to constantly get new thoughts, new points of view, new "wrinkles" in practice. It broadens the mental horizon, gets one out of the ruts of the daily grind, and makes the doctor in every way a better all-around man. It is highly educational, a continuous post-graduate course, and much better than a large library. The doctor who does not believe in joining medical societies reminds one of Kipling's "The Cat that Walked by Himself"—a cold, selfish, self-contained business man, who, while he may be financially successful, never attains to that higher degree of Beloved Physician, a help and an inspiration to all with whom he comes in contact.

It is the duty of every person, and especially of every physician, to so rule his life that after he has passed away it can be said of him "the world is better for his having lived."

No man can afford to be independent or exclusive; every one must help others, and accept help from others, if the highest good to the greatest number is to be attained. In case of a suit for mal-practice, or of other troubles connected with professional life, it is better to have the backing of the county, the State, and the national medical societies, than of all the insurance companies in the land. It goes much further with a jury.

It costs nothing, less than nothing, to belong to the American Medical Association, for the annual dues pays for the best medical weekly paper in the world, worth far more than the cost. It costs something to attend the meetings, but it pays. It is useless to say that you can get just as much out of it by reading the papers after they are published, for it is not true. You do not get the emphasis, the tone, the facial expression: you miss much of the discussion, the valuable little side remarks, the unrecorded comments that come after. Hear the paper read, see the reader, and then read the paper again after it is published, and see how much more you can get out of it, and how much more useful it is to you.

Moreover, in attending the meetings of the A. M. A. you come in personal, social

contact with the great leaders of thought and action in the profession, not only of this country, but many from foreign lands. You see what manner of men they are, get an idea of how they think and work, and get some inkling of the cause of their greatness, and their success.

It is an uplifting, an encouraging and inspiring experience to attend these great meetings. It broadens one's mental horizon, and gives him a larger and better conception of his daily work, and his professional life, with its duties to himself and others. The A. M. A. harmonizes and unifies the medical profession in our nation, and makes it strong for defense, and aggressive for good. Its good effect can be noted this year in the United States Senate, and it was largely through its efforts that the "pure drug and food law" was put in force.

If a large enough proportion of the physicians of our State belong to our State society, it, also, can have most valuable and important influence in State elections, and State legislation. With 2,000 New Jersey doctors behind a bill, the Legislature would hesitate a long time before smothering it in committee. The members would be very apt to save to themselves, "How many votes can these 2,000 doctors influence?" It means better management for our State institutions for the insane, the epileptic, the feeble-minded, the criminally inclined young. It means better jails, penitentiaries and prisons, and better effects on their inmates. It means proper support for institutions for the tuberculous, for inebriates, for the aged and infirm. It means better State sanitation, better drainage, fewer mosquitoes, fewer flies, less polluted drinking water, and a lower death rate. For all the physicians in New Jersey, that are eligible, to belong to the State society, and to work together as one, means all these things without any doubt. Isn't it worth the while?

The New Jersey Sanitary Association has 234 members. Of these 81 are doctors of medicine, 30 are civil or sanitary engineers, 10 are doctors of pharmacy, 9 are doctors of veterinary surgery, 2 are clergymen, and the others are, lawyers, merchants, sanitary plumbers, capitalists and teachers. The proportion of physicians is entirely too low. Medical men should take the lead in sanitary matters, and should compose at least one-half the



membership of the State sanitary society. Every board of health physician, especially, in the State, should belong to this society, and he is not doing his full duty to the community which he serves unless he does.

Moreover, the municipality that employs him should pay his membership fee, and his expenses to the annual meeting; they could not make a better investment of the public funds. I know of nothing that will better keep a physician up to date in sanitary matters, or make him a more efficient health officer, than attendance on these meetings.

Every physician in New Jersey should esteem it a high privilege to belong to the Society for the Relief of Widows and Orphans of Medical Men. At present this society has only 378 members, although it has been in existence nearly 27 years. It is not an insurance society, but a benevolent association. It gives each member the privilege of contributing one dollar to help the widow of a deceased brother physician, and to do it in a delicate way that carries no hurt with it. We cannot go to the widow and say "Here is a dollar to help you along," for she would probably refuse it, and properly, too, and feel hurt besides. But coming, as it does, from a society organized for that special purpose, puts it in a different light. And how many medical men leave their families in such a financial condition that a little help just at that time is not acceptable? If the widow happens to be in comfortable financial circumstances, she can return the money as a gift to the society, as some have done. She then becomes a *benefactor*, and the money goes into the permanent fund, the interest of which is used to help support, and educate the orphans of medical men. Could there be any finer charity than this? The British society, and the New York State society, modeled on the same lines, have been very successful and have done an enormous amount of good.

Besides these five societies, there are many smaller local societies that are well worth belonging to, and that are simply so many schools for the higher education of physicians and surgeons. It is impossible for a doctor to belong to too many such societies. He cannot invest his time and money in any way that will bring him richer returns.

Whatever societies a doctor belongs to, he should be an active member in all, giv-

ing as well as receiving, joining freely in the discussions, and writing papers from time to time on the subjects with which he has had the most experience. There is nothing that will give a doctor so good a knowledge of a subject as to write a paper on it. It is not necessary to publish the paper, it is the writing of it that does him the good. If the paper he reads before his society contains nothing whatever of value, it will still probably call forth a discussion that will be of great value to all.

The essence of this society-membership matter is simply a means to an end, that end being the higher education of the doctor, and it is the best and cheapest means to that end known.

The doctor who has ceased to learn is rapidly going backward, and getting out of date. He will soon be an "old foggy" and unable to earn a living.

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## WHAT IS MEDICINE? AN ABSTRACTION.

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By G. K. Dickinson, M. D.  
Jersey City.

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Human suffering being universal and for all time, treatment of same has consequently been common property of mankind. Even the lower animals show a disposition to aid each other in time of distress.

The art of healing—the practice of medicine—is an impulse as well as a profession. It would be inconsistent to accept any definition of what the practice of medicine may be from the standpoint of the physician alone. We say practice of "medicine" from habit. Medicine means drugs, but, before the time of Galen as well as to-day much relief and many cures were obtained without their aid.

Every profession should be judged by the best that is in it, and to comprehend properly the medical art, its history should be well known, a disorderly mental attitude being abated by thorough education. Few minds are so strongly made that they give themselves only to observations and rational deduction, while the ever present tendency is to build hypotheses on few observations and then speculate as to treatment. The control of this tendency is scientific cultivation, which would soon quell the condition of anarchy so prevalent in therapeutics.

The history of medicine is but a repetition of man's early mind endeavoring to discover, and, unfortunately, to theorize prematurely. Hippocrates over 400 years B. C. first wrote connectedly of disease conditions, and for 600 years his dictum of the study of disease held the professional mind. Then in 130 A. D. came Galen, who saw a new light and who taught the study of drug action. He believed that disease and distressing symptoms should be combated by medicines which produced contrary effects, and so congenial was his belief to the average mind, professional and lay, that to the present day its effects are largely felt.

Medicine is the art of healing—therapeutics. For centuries this has been its sole definition, and with the exception of anatomy about all that was considered in its study. It was clinical, empirical, being the result of the experience of numerous members of the profession and laity, acquired at the bed-side, influenced by the mental attitude of the physician and necessarily restricted by the meagreness of individual experience. Its logic was inductive. As a consequence, the tendency was for each practitioner to put a metaphysical strain to his opinions. Treatment was ever changing and generally unreliable. From the experience of centuries of medical work we have very little to which we can turn in good faith. It is this side of medicine which has allowed of the development of the homeopath, the osteopath, and, in fact, all the exclusive dogmas.

For ages medical treatment depended upon doctors' opinions, not upon laws. Man's mind naturally ran to fanciful theories, consequently, the practice of therapeutics not being a science, as many dogmas were evolved as there were individual minds. That characteristic holds with many of the profession even to-day for it has largely forgotten that treatment is not entirely by Galenic preparations, but by dieting, the effect of water, the application of the hand (whether massage or surgical work), electricity, sanitary rules, serums, etc.

Even in Galen's time there were men who did not agree with his ideas and who actively antagonized many of his opinions. And it is said he grieved for fear the truth in medicine might be permanently perverted by their insistence. Hahnemann in his wisdom gave prominence to

the doctrines of similas, but not being satisfied with promulgating a truth he allowed himself to philosophize and add to his discovery fallacies of dilutions and triturations with the consequent decline of Hahnemannism.

At the time of the Romans and perhaps before, massage and passive motion were much advocated and employed. The Swede, Ling, has recently elaborated this type of therapeutic treatment, which can be explained on the researches of Ross and Head. Still of Missouri, perhaps unconsciously, has taken advantage of the excellent effects to be obtained from this kind of treatment, but in his ignorance, not to say charlatanry, has established another exclusive dogma. Osteopathy, so-called, is but a revival of well-known scientifically established methods.

When it is recognized that many of the marked advances in medical practice have originated from the quacks (to use an undignified term), perhaps we can thank the man from Missouri for waking us up, even though we are disgusted with his pathologic explanation as well as with the exclusive use of the treatment.

While the mass of the profession has been satisfied with superficial and symptomatic diagnosis and with treatment based thereon, a few, scientifically inclined, or rather, with minds inclined to the truth, have been investigating the working of nature in the body. Within the last century the study of physiology, normal and morbid, has made great advances, on which, with bio-chemistry, bacteriology (both of which have originated in recent years), experimental pharmacology and the other sciences developed in the laboratory, is generally growing what seems to be a new school of medicine and a rational one. Its logic is deductive. Not yet awhile can we call it complete for there is still much to be learned in all these sciences—based largely on animal experimentations. There are many blank spaces. Much is to be discovered; much to be proven.

The great essential in accurate treatment is accurately detailed diagnosis with a broad knowledge of the action of therapeutic agents. This knowledge acquired by scientific workers in medicine has given very material aid in diagnosis and a better comprehension of the symptoms of disease condition.

The knowledge of the uneducated man



is inductive. From one experience he will evolve a broad hypothesis, which he calls a theory, and uses it in subsequent actions. Such men in medicine naturally tend to be empirics. There is an ever increasing number of educated men trained in scientific thought, who will, before planning a method of treatment, reason out the causes from the symptoms and signs of diseased states from the scientific knowledge of the day. The time has come when our knowledge of the body in health and disease and our knowledge in experimental therapeutics are sufficient for us to build up a rational plan of treatment, which will be accepted without equivocation by all members of the medical profession as well as by the public, and which will displace, in a large part, the old empirical school. When facts are substituted for doctors' opinions then will therapeutics cease to be barren, for full knowledge ends empiricism.

The profession should stand for itself in a dignified way, remembering that irregular innovations of new thought are but incidents, which, if properly handled, can but advance rational therapeutics.

From the standpoint taken in the beginning of this thesis a practitioner of medicine is one who devotes himself to the relief of physical distress and who so places himself before the public—he the student or empiric.

The public desires specifics and the man who gives promise will have a temporary following. The public must be protected. Constantine, the Great, recognizing the credulity of the people and seeing the pressure of the charlatans to displace the regular practitioner, made a classification according to their accomplishments.

In these days when governors and legislators intervene it looks as if regular medicine was not respected; but we get what we give; and when the members of our craft can represent the full knowledge of the day learnedly, then will the respect given thoroughly satisfy our pride. Until then the public and the profession should unite in its control, demanding that no man be licensed to practice any branch or specialty who has not had a broad preliminary education, academic and medical, nor passed a proper examination.

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The eradication of a hypersensitive area in the nasal mucosa oftentimes will cure an obstinate hay fever.—*American Journal of Surgery.*

## Clinical Reports.

### TRAUMATIC INJURIES TO THE EYE.

(Continued.)

#### A Case of Complicated Cataract.

Charles J. Kipp, M. D.

E. C. has been under my observation for twenty-eight years. When I first saw him he had several attacks of iridocyclitis in the left eye. He was subject to rheumatism and attributed his eye disease to this affection. He denied having had venereal disease. He was a well developed muscular man 23 years of age and seemed to be otherwise in good health. As the result of the many attacks of iridocyclitis the left eye presented this condition: the ocular conjunctiva was not injected; the cornea was clear; the anterior chamber was shallow and the aqueous was clear. The iris seemed somewhat atrophic; the pupil was adherent all around to the lens capsule; the lens was clear, and the eye ground seemed normal.

The right eye was normal in every respect.

All attempts made to break up the adhesions between the pupil and the lens capsule were futile.

During the following two years he had a number of attacks of acute iridocyclitis in both eyes for which he was treated with leeches to the temple, instillations of sulphate of atropin, and internally was given salicylate of sodium. Under this treatment the attacks usually subsided in a short time, but after an attack for which he was not treated by me, the pupils of both eyes were found firmly adherent to the lens capsule. In the hope of preventing further relapses of the iridocyclitis, I attempted to make an iridectomy upward in both eyes. I found, however, that the whole posterior surface of the iris was fastened to the lens capsule, and only the anterior layers could be removed. After the operation, when looked at in ordinary illumination, I seemed to have made a large coloboma in the upper half of the iris as the background was of beautiful black color; viewed, however, by oblique illumination it was seen that the black color of the coloma was due to the presence of the pigment layer of the iris on

the lens. The operation failed to prevent other attacks of the iridocyclitis and his vision was no better than before the operation.

Three years later I made another attempt of iridectomy on the right eye, this time downward with the same result as in the previous operations.

During the following fifteen years I treated the man for many other attacks of iridocyclitis and his vision gradually became so bad that he could no longer do the work of a street cleaner. He begged me to make at least another attempt to improve his vision and I agreed to operate on his left eye which was if anything the poorest in sight. The tension was normal and projection fairly good in all directions.

On October 6, 1908, I operated as follows: I entered the sharpe v. Graefe knife at the limbus in the horizontal meridian of the cornea, passed it through the iris and lens and made the counter puncture in the limbus in the horizontal meridian on the nasal side and finished this section by coming out in the limbus above. On the completion of this section a quantity of cortical matter of brown color and almost liquid consistency escaped. To deliver the nucleus which was of medium size and of deep brown color considerable pressure was required. During the last manipulation, thin vitreous began to escape, which caused me to abstain from attempts of getting out some of the iris. The eye was bandaged and the patient put to bed.

I opened the eye forty-eight hours after the operation and found the wound closed and no sign of reaction. The patient had no pain at any time during the next ten days.

On the twelfth day after the operation he complained of having had pain in the eye during the previous night, and on examination I found that the greater part of the wound had reopened and that there was vitreous protruding through the wound. He admitted that as the eye had itched a good deal he had rubbed it and doubtless thus caused the reopening of the wound. I abscised the protruding vitreous, bandaged the eye and put him back to bed. Three days later I found the wound closed again, and no signs of inflammation were present. Two weeks later I discharged him from the hospital. His eye was white, but he could see no

more than before the removal of the cataract.

On November 23 I attempted to make an artificial pupil by making an incision with a lance shaped knife in the lower half of the cornea, and in the diaphragm composed of iris and capsule. I then passed one blade of de Wecker's iris scissors through the opening in the diaphragm and the other in front of it and made it a vertical incision about 8 mm. in length. The lips of the incision gaped at once. There was no hemorrhage. The operation was not followed by any reaction. Now he has a fair sized pupil and his vision with a -9D. glass equals 6/60 and it is probable that it will improve still more.

Many cases like this one have been operated with as much success by other surgeons and this one is deemed worthy of being placed on record, simply as showing that at least useful vision may be regained to eyes that have undergone many inflammatory attacks ending in complete exclusion and occlusion of the pupil followed by Morgagnian cataract.

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#### CASE 2.

**A blow on the eye; hemorrhage in anterior chamber; subluxation of lens, followed six years later by iridocyclitis of the other eye.**

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Charles J. Kipp, M. D.

E. C., about 40 years of age, in excellent general health and who had never had a disease of either eye, was struck by a fist on the right eye, a few days before I first saw him. I found the left eye normal in every respect. The right eye was as follows: Both lids were edematous. The ocular conjunctiva was injected throughout. The cornea was hazy in its lower half. The anterior chamber was nearly filled with blood. The iris could not be seen. He had good perception of light, and projection was prompt in all directions. I treated him with cold applications to the lids and instillations of a one per cent. solution of atropin, and as this did not relieve the pain I applied six leeches to the right temple. After that he had so little pain that he did not send for me again, till two months later. At this time the skin of the lids was normal. He had atropin conjunctivitis. There was much circum-corneal injection. The cornea was the site of a large shallow ulcer in its lower half. The anterior chamber was of nor-



mal size in lower half, but somewhat shallow in upper part, owing to a protrusion of the iris. The aqueous humor was clear, all blood having been absorbed. The pupil was well dilated. The lens was now seen to be dislocated upwards and forwards pushing the ciliary margin of the iris forward. The vitreous was full of floating opacities. Details of fundus could not be made out. He was able to see large objects about the room. The atropin drops were stopped and a weak solution of sulphate of zinc ( $\frac{1}{4}$  per cent.) was instilled twice daily. Compresses wet with a warm solution of boric acid were kept on the eye several hours daily. A month later the atropin conjunctivitis had subsided. The sclerotic was white, the ulcer of the cornea was healed. I advised the extraction of the dislocated lens which was becoming opaque, but the patient declined operation and I did not see him again till six years later.

On this occasion he came to consult me with regard to the loss of vision in his left eye. He was now totally blind in both eyes. The injured right eye was now enlarged in all directions. The sclerotic was white and was the seat of a large staphyloma, 3 mm. upward from the upper corneal margin. It was about 1 cm. in length, 6 mm. in breadth and about 4 mm. high; it was of a dark bluish color and covered by conjunctiva. The cornea was hazy throughout. The anterior chamber was very shallow, the atrophic iris almost in contact with the posterior surface of the cornea; the pupil was of medium size; the lens was now a calcareous cataract and was in the same position as before, T-2. The eye was totally blind.

The left eye was as follows: There was a faint ciliary injection. The cornea was hazy. The anterior chamber was very shallow. The iris was atrophic. The pupil was very small and closed by a membrane, and the pupillary margin of the iris was adherent to the lens capsule everywhere. The tension was reduced. He could distinguish light from darkness, but projection was uncertain.

On inquiry, I learned from him that the vision of the left eye began to fail about six months before. The eye soon became painful and red, but he had paid no attention to this during the following weeks. Since then he has been under treatment elsewhere. The eye had not received a traumatic injury. I regarded the case ut-

terly hopeless and advised against surgical intervention. I did not see him again, but have learned that he has died since then.

This case derives its interest from the fact that a malignant iridochoroiditis developed in an eye, six years after its fellow eye had received an injury which had caused an iridocyclitis from which the eye recovered, and a subluxation of the lens, which subsequently caused the development of a secondary glaucoma. It is well known that clinically an eye suffering from a sympathetic iridochoroiditis, presents no features which differ from those of an eye with an iridochoroiditis of other origin and it is a question whether or not in this case the disease of the left eye was of a sympathetic nature.

Schirmer *Sympathische Augenerkrankungen*, Graefe-Saemisch, *Handbuch der gesamten Augenheilkunde 2te Auflage*, II Theil, VI Band, VIII Kapitel p. 40 says: "The most frequent cause of sympathetic ophthalmia are perforating injuries of the other eye, which do not cicatrise smoothly, but are followed by a long continued inflammation."

In the case here reported, the blow on the eye was followed by an intense iridocyclitis but this had subsided years before the other eye became affected. There was moreover no rupture of the globe caused by the injury, at least I was unable to discover even a subconjunctival rupture of the sclerotic, although I made a careful search for such, and the ulcer of the cornea which developed some weeks after the injury did not perforate this membrane. It is therefore not probable that the inflammation which followed the blow was of a microbic nature, and as in the opinion of the great majority of ophthalmologists, only eyes with an iridochoroiditis due to an ectogenous infection, can cause a sympathetic inflammation of the other eye, it seems most probable, if not certain, that the inflammation which destroyed the left eye was not of this nature. There are, however, some cases on record in which a subluxation of the lens is supposed to have caused a sympathetic inflammation of the other eye, but they are not well authenticated. In my case the glaucomatous degeneration which was present in the injured eye when I last saw the patient was doubtless due to the dislocation of the lens, but glaucoma never causes sympathetic ophthalmia. The

ciliary staphyloma present might possibly have been the point of entrance for pathogenic microbes, which caused an iridochoroiditis previous to my last examination and which had again subsided at the time I saw the patient, but had caused the iridochoroiditis of the left eye. This is, however, highly improbable, as at the last examination the eye originally injured was entirely free from signs of inflammation. In the great majority of cases of sympathetic troubles, the eye giving rise to the sympathetic trouble is in a state of inflammation, some times of a low character, at the time the sympathetic trouble begins in the other eye. About the only support for the theory that the disease of the left eye was caused by the inflammation of the other eye, is that the patient at the time of the development of the disease of the left eye was entirely free from any of the general disease with which an iridochoroiditis is sometimes associated.

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### CASE 3.

#### PERFORATING WOUND OF CORNEA AND LENS.

Reported by Dr. C. J. Kipp, Newark.

E. R., 40 years of age, an iron worker by trade, was first seen by me June 4, 1907. He is of rather slender build, but says that he is now and always has been in good health. On the day before he came to me he had been struck in his left eye by a carpet tack and was now practically blind, as his right eye had been totally blind for the past 15 years, the result of an injury. I found that the right eye was atrophic, and showed evidences of siderosis bulbi, the iris was discolored and atrophic, the pupil was very small and adherent all round to the lens capsule; the lens was opaque and of a yellowish color. The eye was totally blind.

The left eye was as follows: The eyelids were somewhat oedematous. The conjunctiva of the eyeball was intensely injected and oedematous. The cornea was hazy in its central portion and in the center of the hazy area was a ragged wound, the edges of which were infiltrated. The anterior chamber was absent: the iris rested against the cornea. The pupil was small. The lens capsule was torn in the pupillary area, and lens matter was in the pupil. He could recognize only movements of the hand a short distance from the eye. He was at once put to bed, cold compresses were applied to the lids; the conjunctival sac was washed out with a solution of boric acid and a 1 per cent. solution of atropin was instilled every two hours. Two days later the corneal wound was found closed, the anterior chamber was restored, and the pupil was slightly dilated. As he complained of much pain in the eye four leeches

were applied to the temple. Under this treatment the pain subsided for some days, but returned with increased intensity. Dionin in substance was used daily for a while, but the iridocyclitis would not yield to these remedies. The pupil remained small and many posterior synechiae developed. The iris was pushed forward by the swollen lens, and a small quantity of lens matter protruded in the pupil. Eleven days after his first visit to me, I concluded to relieve the tension of the eye, which was now considerably increased, by extracting the cataract. I made an incision of about 6 mm. in length in the upper part of the cornea, and evacuated a good deal of the lens matter, under ether anaesthesia. This operation was followed by great relief of the pain in the eye. The wound healed kindly and a few days later the pupil was dilated much more than before the operation. The symptoms of the iridocyclitis gradually passed away, and by July 3, just a month after he received the injury, all of the cataract had been absorbed. There was, of course, a macula in the central part of the cornea and some opaque capsule of the lens in the pupil, yet with proper glasses his vision was equal to 5/12 on October 8 of the same year. He resumed his work, and I did not see him again till December 17, 1908, when he returned with the statement that his vision had become much worse again in the last few months. The examination showed this was due to thickening of the lens capsule, and I advised him to come back and let me incise the thickened capsule. This he did, and I made a long incision in the capsule with a narrow v. Graefe knife. This operation was not followed by any reaction, and a few days later the test showed that his vision was again as good as it was on October 8, 1907.

This case shows that by judicious treatment, instituted soon after the infliction of even so serious an injury, total loss of vision may be prevented. This patient had already lost an eye, and he would have become a burden on the community, if the left eye had not been saved from destruction.

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### CASE 4.

#### PERFORATING WOUND OF CORNEA, WOUND OF IRIS AND SUBLUXATION OF LENS.

Reported by Dr. C. J. Kipp, Newark

G. W., 40 years of age, German, laborer, was first seen by me December 22, 1907, at the Newark Eye and Ear Infirmary. According to his statement he had been struck in the right eye by a piece of wood on the day before, and was now practically blind, as the left eye had been enucleated for a similar injury fifteen years ago. Examination of the right eye revealed the following condition: Vision was reduced to about 5/36. The visual field was intact. The conjunctiva of the eyeball was injected all over, and somewhat oedematous. The cornea was clear, except close to the inner lower margin, where it was very hazy and was the site of a small lacerated wound. The anterior chamber



was shallow, and filled nearly up to the top with dark red blood. Of the iris only a small rim above could be seen. The tension of the eye was somewhat reduced.

He was put to bed, cold applications to the lids were ordered to be made for an hour at a time every two hours.

Some days later I learned from him that this eye had been much inflamed six years ago, and that the physician who attended him had given it as his opinion that the inflammation was due to the wearing of an artificial eye, which was too large for the socket, and which had pressed on the optic nerve in the left socket. The inflammation passed away in the course of a month, and left the vision about as good as it was previous to the attack. Since then he has had no trouble with the eye till now.

In the course of a few weeks the blood in the anterior chamber was absorbed and the opacity in the cornea cleared. It was then seen that the iris was discolored and a wound in it was seen opposite to the former wound in the cornea. The pupil was of medium size and could not be further dilated by frequent instillations of atropin and dionin solution, although no adhesions between the pupillary margin and the capsule of the lens existed. The lens was seen to be tremulous, and on closer inspection it was discovered that it had been torn from its suspensory ligament below, in and out. It remained attached above and swung back and forward with the motion of the eye. It was still transparent, but with the ophthalmoscope no details of fundus could be made out, as the vitreous contained great floating opacities, some of which were of a bright red color. The cold applications to the lids had been given up after the first week and only the instillations of atropin and dionin were continued.

By the 10th of January, 1908, the eye was free from all signs of inflammation, and he was allowed to go home. At this time the lens was still transparent, and his vision was sufficient to permit him to do work about the house.

After this time he was seen about every two weeks. The lens gradually became opaque, and by October 13 the cataract was so far advanced that he could no longer find his way about the house. He begged me to do something more for him, and although I had explained to him the danger attending an attempt to extract a dislocated lens, he requested me to operate as, even if the operation should not be successful, he could not be worse off than he was now.

On October 13, 1908, I made with a v. Graefe knife a large corneal flap downwards, embracing about one-half of the circumference of the cornea. The iris did not prolapse and was pulled out by a blunt Tyrrell hook, and a large piece cut off. This was followed by the escape of some thin fluid vitreous. I then introduced a wire loop, pushed it high up behind the lens and withdrew the lens in its capsule; but little vitreous was lost during this manipulation. The eye was dressed in the usual way. The operation was not followed by much reaction, and on the second day after the operation the wound was found closed. He was kept in the hospital till November 25, 1908. When last examined January 16, 1909, vision with the proper glass was equal to 20/70. Although there were still

small blood clots seen in the lower part of the vitreous chamber, all signs of inflammation had disappeared. Since then he has resumed his work.

Similar cases are not infrequently met with in hospital practice, and there is nothing specially noteworthy about this case. Familiarity with dangers is said to breed contempt for them, and this seems to be demonstrated by the numerous cases seen in which the loss of an eye from a traumatic injury is followed by a similar injury to the remaining one. It has been my practice to warn such people after the loss of an eye against exposure to injury of the other eye, but with little effect. In a considerable number I have seen both eyes lost through an almost identical injury.

My reason for making the corneal flap downward instead of upward as is usually done, was that I felt that the loss of vitreous would be much greater if the eyeball had to be held down with forceps during the extraction of the lens. The lens was of a globular form, and required a large opening in the cornea for its extraction.

## Articles from Medical Journals.

### SUGGESTIONS CONCERNING THE CLIMATIC ADVANTAGES OF SOUTHERN CALIFORNIA.

By E. L. B. Godfrey, M. D.

(From the Camden County Medical Society Journal, February, 1909.)

The establishment of sanatoria in the various States of the Union, and the institution of dispensaries in the larger cities for the treatment and cure of tuberculosis have revolutionized the preventive and curative treatment of that disease nearly as much as the discovery of the tubercular bacillus by Dr. Koch.

These institutions combine scientific with practical treatment and have thus removed the ban of hopelessness from tuberculosis and mitigated the sufferings of millions.

They have demonstrated the difference between tuberculosis and consumption, and have shown that the former is curable in its incipient state, and that the latter, even in its septic state, is far more amenable to treatment than was formerly believed.

They have shown that culture products properly administered, viz.; tuberculin in incipient and non-febrile cases, and streptolytic serum in mixed and septic infection, will render both conditions amenable to treatment, although it is admitted that no specific medication has yet been found that will destroy the bacillus itself.

They have exposed the fallacy of forced and undue feeding, and have established the axiom that the nutrition of the patient is the objective point in alimentation. The diet should be selected, not especially to fatten, but to build up the resisting power and to promote the functions of digestion, assimilation and excretion.

They have also shown that tuberculosis is curable in any climatic zone; yet no one will deny that climatic treatment is of great value to

those who are physically and financially able to avail themselves of it. When sanatory and climatic treatment can be combined; when a daily out-door life in a suitable climate can be obtained with sanatoria instruction in personal hygiene, selected alimentation and scientific medication, under the daily guidance of a physician, the very best results may be expected. Whatever climate may be selected, sanatoria treatment is better than ambulatory.

The results of serum treatment of tuberculosis, cerebro-spinal meningitis, tetanus, diphtheria and typhoid fever forcibly illustrate that greater progress has been made lately in medicine than in surgery and that the physician today takes precedence of the surgeon in scientific advancement.

In consequence of the great progress made in the treatment of tuberculosis through sanatoria and dispensaries, there has been a marked falling off of late years in the number of cases coming to Southern California, heretofore so highly recommended to consumptives. The drastic rules of health boards, hotels and boarding houses in the cities and towns of Southern California, have compelled many to seek other resorts and some have chosen the dry, desert climate of Arizona and New Mexico, which offers greater advantages to mixed cases than the moister climate of Southern California. Incipient cases, under proper direction, will reap great benefit along the foot-hills of the Sierra Madre Mountains in Southern California, where the atmosphere is perhaps as pure and aseptic as can be found. When to this clear, dry atmosphere is added sunshine, light winds, a moderate altitude sufficient to induce sleep and frequent respirations and a dry soil, admitting of out-door life nearly every day, good results must follow because these are the contributing factors in the arrest of tuberculosis. Sunshine has a triple value; it promotes cheerfulness of mind, builds up weakened vitality of body and tends to destroy the bacillus of tuberculosis.

Climatic treatment for tuberculosis should only be recommended for selected cases, able financially to command the advantages that such treatment affords; otherwise disappointment, home sickness and suffering may await the subject without funds.

Passing from the subject of tuberculosis to that of the climate of Southern California, it may be asked what other diseases will receive benefit from a sojourn in this section.

Without discussing the peculiar topographical features which influence the climate of Southern California and make it a fixed asset of this section, viz.: the Pacific Ocean with the Japan Current and trade winds, the Sierra Madre Mountains which by their altitude (5,000 to 10,000 feet) shut off the cold winds of the North and East; the broad desert of California which heats the atmosphere, the dry soil of the broad valleys, the daily alternating air currents passing back and forth between the ocean and the mountains, and the dry and wet seasons of six months each, it may be said, in reply, that a great variety of unhealthy conditions will receive benefit.

Primarily, any condition or state of health will improve here when the vital forces are substandard either through inheritance or acquisition, or where the subject is unable to resist the cold, humid and changeable climate of the

East in winter, or the hot, humid climate of the summer. There is less expenditure of energy required to meet the climatic conditions here than in the East; consequently the vital forces are conserved, and, all other things being equal, life may be prolonged by a residence here.

It may be said specifically that incipient tuberculosis, chronic bronchitis, asthma, myocarditis, endocarditis, chronic nephritis, the early stages of locomotor ataxia, neurasthenia, all catarrhal conditions and convalescents from acute diseases will obtain benefit. It takes, however, a year including both the dry and wet seasons for a person to become acclimated. Newcomers are sensitive to the cold of the winter or wet season and to the heat of the summer or dry season; while the acclimated resident seldom complains of either. The thermometer never shows the extremes of heat found in the East, except at times during the dry or summer season, when it may indicate a high degree of heat at midday. This is well borne, because the atmosphere is dry, and heat stroke is unknown. For the same reason, the cold of winter is invigorating and not at all unpleasant. The nights are always cool, both summer and winter. The old inhabitants prefer the dry summer to the rainy, winter season, and physicians recommending the climate of Southern California, for any of the conditions above named, should send patients here during the summer, when they can wander about at will and sleep in the open air with the positive assurance that there will be no rain.

## PERSONAL HYGIENE.

### A British Criticism of Reduced Diets.

(By Percy G. Stiles, Ph. D., in *American Journal of Public Hygiene*, November, 1908.)

The advocacy of low feeding (Fletcher, Chittenden, Fisher) has been mainly confined to America. We have previously called attention to the strong counter-movement in this country in which Benedict has been prominent. There has just now appeared a highly interesting and important address by Sir James Crichton-Browne dealing with the subject under the title, "Parsimony in Diet," *Journal of the Royal Institute of Public Health*, Vol. XVI., No. 8. No extended review of this article can be undertaken, but certain portions of it call for consideration.

The fact most emphasized by the writer is the obvious one that if the New Haven workers and their enthusiastic disciples at Battle Creek are distinctly in the right, they form a very slender company of elect in an unregenerate world. The people whose diets most nearly approach their standard are those whose poverty denies them what they crave. The protein ration of the very poor is Chittenden's ideal. The quantity of food furnished in British prisons corresponds closely with what he recommends. Prisoners fed according to this scheme deteriorate physically; and we have the testimony of John Burns, based on a voluntary experiment, that the suffering from hunger is cruelly intense.

It is most important to account for the dis-



parity between the experiences of students who grow strong upon mammal feeding and those of prisoners whose health and strength decline with the same quantity of the food-stuffs. Of course in one case the food is attractive and varied, in the other simple and monotonous. But hunger might be expected to insure an economical use of the diet, no matter how coarse and plain. The mental condition of the two classes may have a bearing on their nutrition, but it is hard to see why an intellectual man should need less food than an illiterate of the same weight. It seems to us (and this is on our own responsibility, and not Crichton-Browne's) that the element of difference between the two is that of previous condition. The subjects who have been so well and active for considerable periods on Chittenden's diets have been well nourished to start with. The majority of prisoners have not. They have been deficient in reserve stores. Such persons seem to be well adapted to give us indications of the sufficiency or the inadequacy of a given diet. Improvement or injury cannot be long delayed.

Crichton-Browne, like Benedict, concludes that temporary success with a low ration cannot be held to prove its superiority. Nothing less than lifelong health with such feeding, or better still, the prosperity of successive generations, can fully justify such a departure from instinctive practice. Our author states that British laborers lose vigor and efficiency at an age of about forty years. For a long time they have been strong and active with no obvious sign of being underfed. When the comparatively early decline sets in, is it not reasonable to suppose that the underlying cause is to be found in a diet which was all the time below the optimum? The ill-effects of overeating are long delayed, and it is not strange that the physical results of underfeeding are equally slow to appear. New England farmers certainly consume Atwater rations rather than the Chittenden type, and their capacity for hard work does not decline at forty as a rule.

It must be admitted that it is possible to overestimate the importance of diet as influencing the health of this or that class of people. We must not leave out of account other factors, such as hours of sleep, ventilation, monotony or variety in life, happiness or discontent. But it seems more and more clear that when these other conditions are unfavorable, liberal feeding can partly offset their effects. Is it likely that the experiments of Chittenden and Fisher would have been so striking if their subjects had been made to endure tenement-house conditions? It is privately admitted that some severe cases of "blues" developed at New Haven. With depressing surroundings this tendency would have been serious.

The question of resistance to infection is one which has to be faced. Crichton-Browne is positive in his belief that the older and more generous dietetic standards make for protection against the lodgment of germs and better the chances in the struggle when disease already exists. In support of this position he cites the practice of rich feeding—sometimes incredible in quantity—prevailing in many successful sanatoria. Reference to his paper will reward the student of these timely questions.

## THE SEAT OF CONSCIOUSNESS.

Dr. Frederick Peterson, at the October meeting of the New York Neurological Society, said: Psychologists, metaphysicians, physiologists and physicians have written a great deal concerning consciousness, but if they have said anything of any great significance it has eluded my observation. The most tangible thing that I have been able to grasp in my reading is that consciousness is a stream, a flow, a flight, a current, a thread, an "orderly succession of changes." I take it for granted that whatever consciousness may be it has a seat. It has been assumed that if the body be removed portion by portion, first the legs and the arms, and then the trunk as far as the base of the skull, that consciousness, if the circulation and oxygenation be kept up, still persists in the head, and that its seat is in the brain. Such an experiment, in effect, has often been performed for us in broken necks and other spinal-cord lesions. Those who have dared to surmise further have intimated that consciousness is diffused throughout the brain, or even that it is an attribute of the cortex of the brain alone. In my opinion, the seat of that power which produces the manifestations of consciousness is in the basal ganglia (probably the corpora striata), and consciousness is a peculiar summation of energy at that point, capable of being directed like the rays of a searchlight into this or that portion of the brain. The daily physiologic variation of consciousness in the condition of sleep is certainly a reduction in consciousness from the highest summation of energies to some lower level. Sleeping and waking may be observed in a vast group of animals that have little or no cerebral development. Furthermore, the phenomena of sleep are observed in new-born human infants, despite the fact that the cerebrum is empty of experience and anatomically still much undeveloped as to its connections with the rest of the brain. They are also observed in children born without a cerebrum, and even in dogs deprived of the hemispheres. In innumerable cases of extensive loss of cerebral substance, of a hemisphere, as in infantile cerebral palsies (a frontal lobe in the crow-bar case, etc.), consciousness itself seemed unimpaired throughout life. These observations seemed to show that consciousness, at least as regards its variations in the condition of sleep, does not reside in the cerebrum. Another argument of a similar bearing is the fact that every individual with a brain stored full of all the experience of a lifetime is only actually awake at any one time around some particular small group of functions or ideas that occupy consciousness.

Passing now to another series of pathologic conditions, the one disorder which has led me to think much of this subject is epilepsy, in which disease loss of consciousness is the most extraordinary and often the only symptom; for example, tic de salaam and other forms of petit mal, in which the patient drops suddenly to the floor with loss of consciousness, and quite as suddenly rises again in full possession of his faculties. The loss of consciousness is complete and often lasts but a fraction of a second. How can we account for such a phenomenon? If consciousness were a diffused attribute of the whole brain, what spasm of blood vessels or

other physical process familiar to us could act and be readjusted with such speed? What portion of the brain is so constructed as to be, apparently, in intimate connection with every other? The corpora striata. There is no part of the brain of which we know so little. As Edinger said, here we have "a mighty portion of the brain that must be of enormous significance; otherwise it would not be always present, from the fish up to the man."

Dr. Adolf Meyer said: Mr. Peterson's thesis brings back to us the proposition which Dr. P. Carus advanced about thirteen years ago in the *Journal of Comparative Neurology*, based largely on the argument that the corpora striata formed a large, bulky part of the brain to which no other function could be assigned. Gaule in turn assigned the function to the optic thalamus, ignoring entirely the question of what we meant by "consciousness" as a positive function, it seems that the evidence that Dr. Peterson has presented could best be summed up as evidence of vulnerability of mechanisms of consciousness by a lesion in the basal region. It is evidence in favor of the possibility of localizing the lesions in some types of unconsciousness. As soon as we try to make positive inferences, i. e., as to the "seat of consciousness," we are bound to meet a number of difficulties, and one of them is this: contrary to Dr. Peterson's assumption, the corpora striata has relatively very obscure connection with the rest of the brain. This is one of the greatest stumbling-blocks to the theory advanced that the corpora striata should be of such fundamental importance. So far as we know, its connections with the cortex are extremely scanty, and with the rest of the base its connections are essentially those with the hypothalamus. On anatomic grounds alone it would be difficult to explain any connection with the corpora striata and the "seat of consciousness," leaving out of consideration the question whether or not the "seat of consciousness" could be a safe problem to-day.—*A. M. A. Journal*, Nov. 28, 1908.

### PUBLIC SCHOOL EDUCATION.

Dr. Charles Gilmore Kerley, of New York, delivered an address with this title, at the annual meeting of the American Pediatric Society, May 26, 1908. He considered his subject of public school education as it affected the physical and mental development of the child. There were at present 18,000,000 children in the public schools of this country, and they now attend school ten months of the year, five days a week, and five hours a day; therefore, a large part of the responsibility of rearing these children that had formerly belonged to the parent fell to the schools. These children were compelled to read and to write more or less during the time they were in school and by an artificial light. The question arose, what had these schools taught the children? Had they fitted them to compete for a living? It had been shown that a large percentage (from 17 to 80) of the pupils in the public schools were defective. Formerly the children in the schools were mostly English speaking and now this was not the case. In the larger cities there were from 75 to 90 per cent. foreign-born children. The school system was seriously at fault in not

teaching something of sex. Dr. Prince A. Morrow was authority for the statement that 75 per cent. of the population either have or have had gonorrhea and that from 10 to 14 per cent. had contracted syphilis. Sixty per cent. of the morbidity among the male population was due to these infections. Thirty-five per cent. of the blindness was due to gonorrhea, and from 60 to 80 per cent. of the pelvic disorders of women were due to the same disease. Dr. Kerley said that he had known three girls who became pregnant in their thirteenth year and all of them were ignorant of the nature of the sexual relation. It was evident that the children were being educated to the danger point. The competitive spirit was pushed to its limit and the whole atmosphere was charged with the inevitable causes of disappointment, failure and suicide. The over-education of the unfit brought forth tastes, traits and desires that he should never have known of and was the cause of much dishonesty. Sons of trades people no longer would follow the calling of their fathers; all wished to become professional men and bank presidents. Dr. Kerley thought it would be wise to insert into the curriculum a few minutes' talk on the nobility of labor and to emphasize the fact that all labor was honorable except that which was badly done. Children had the right to demand better physical advantages than they were receiving at the present time. If they were to judge the public school system by the manner in which it discharged its duty in these directions they would have to admit that it had failed in its function.—*Medical Record*.

### NIHILOPATHY.

(From *Bulletin-Journal of Animal Therapy*, November, 1908.)

There is a new school of medicine with a large membership and with as sharply defined tenets as those of erstwhile allopathy, and homoeopathy, and eclecticism. It is just as worthy of a distinct name as any pathy or ism of history. It has originated almost wholly from the regular school of practice. Its title, as usual, must be taken from its therapeutic beliefs. I suggest the name of *Nihilopathy*.

It is an outgrowth of the revolution that has occurred in theoretical medicine during the last half-century. The ultra-scientific and their apes (more numerous) appear to have been overwhelmed by the radical reconstruction of non-therapeutic medicine, and now demand that therapeutics be equally scientific or they will have none of it. If they stopped with the demand their influence would be all constructive, but when they go farther and become therapeutic nihilists their influence becomes exactly the opposite. They have allowed the destruction of a few ancient therapeutic dogmas to make them general therapeutic iconoclasts.

The new school will live, but it cannot dominate because it is based on a fallacy. It interdicts empiricism, which generated and developed therapy and is to-day responsible for practically all of our remedial equipment. It not only generated treatment but medicine itself. While the physiological action of many empirically born agents has been scientifically explained, exactly how they act in a given disease



has been conclusively established regarding very few.

Practical experience alone begot, and practical experience alone explains the specific value of iodides, mercurials, quinine, colchicum, salicylates, and many less specific equipments of practical medicine.

The new school glories in its rigid theoretic tenets, refuses to recognize experience, and ridicules clinical data unsupported by plausible or at least finely drawn theories, and a thousand clinical results weigh nothing when apparently controverted by an abstract theory or even a tenable hypothesis.

The damage this school has done to therapeutic advance is immensely greater than the good it may have done or may do. It was not necessary to evolve therapeutic nihilism in order to encourage scientific therapy. The scientific study of known therapeutic agents and search for the unknown were progressing much more rapidly before the days of the nihilist than since.

*No nihilist has ever discovered anything in treatment and never will*, but his influence is unfortunately not negative. He, with his apes, and his friends the mugwumps, are responsible for the present unpopularity of any but the most ultra-scientific research. Empiric developments of unusual merit in therapy have been practically unknown for twenty years, and this period covers the life history of the school in question.

Its baleful influence has not been entirely obstructive. Because of the dignity and prestige which ultra-conservatism seems always to emanate, this school has destroyed the confidence of many of the other school (the optimists) in remedials invaluable but proven so by experience alone, and they unconsciously prescribe the remedies of empiric origin half-heartedly and with corresponding success.

Not only is their culpability found in their obstructive and destructive effects but likewise in their constructive. These superscientists who cannot tolerate the least breach of empiricism, faith or unanalyzed experience, have done more than any other single or combined cause to fill the ranks of the direct antithesis of their creed—the Christian Scientists and their correlated offshoots and copyists. It is needless to itemize the many other illicit profit takers of medical misanthropy.

While this school comprises many eminent educators, it is largely constructed of gab, or pen-gifted pseudos, who view this school as the en route to the faculty and fame, and of fledgeling medicos who recently left a hospital and welcome therapeutic nihilism because they know nothing but therapeutics.

**MORAL**—If it is right for one school of medicine to refuse to consult with another, *why isn't it infinitely more right for a real physician to refuse to consult with a nihilopathist?*

## Daily Press and Magazine Items

### A National Health Department.

(From the Camden Post-Telegram, December, 19, 1908.)

The care and preservation of the public health is a legitimate and important function of

government. The establishment of a health department at Washington by act of Congress has been frequently suggested, and some time ago an association with this as one of its main objects was organized; but nothing really tangible has actually been accomplished so far, as Congress has taken no action in the matter. The public has been too indifferent. It generally is in regard to health legislation. Only in recent years have local boards of health been considered necessary. It took years to get our State board, the usefulness of which has been long since demonstrated.

Health laws are to a certain extent indices of the progress of civilization, and no part of "the white man's burden" is so obnoxious to the half-civilized as his sanitary laws. In fact, in some of our "possessions" these laws have to be enforced at the point of the bayonet, to protect the native from himself.

When the importance of the subject is fully realized by the public and a sentiment aroused in regard to it, there will be no trouble in getting legislative action.

If there is any more comprehensive, logical and forceful presentation of the subject than is given in the address of Dr. Dowling Benjamin before the Camden County Medical Society at its December meeting, we do not know where it can be found. That none of the medical men present seriously questioned any of the impressive facts brought out by the doctor, seems remarkable.

Since the presentation of the subject was of such a character as to call forth unanimous approval of the proposition, by the medical men present, they can do no better public service than to push it along. One of the officers of the society says of the paper that "it was in reality a heart-to-heart talk with the American people, and if it ever properly reaches them it should accomplish much good."

The Post-Telegram, always appreciative of good citizenship, is glad to help perpetuate the nation.

### The Anti-Vivisectionists.

(From the North American, Philadelphia, Pa., February 8, 1909.)

All history, we believe, bears out our belief that most of the deadly errors, the suffering and the calamities of the world have been caused less by malice and conscious criminality than by well-meaning ignorance. Within the past week Philadelphia has seen an instance of that type of ignorance which is an infectious disease, curable only by copious and repeated doses of truth, administered before the ailment has progressed into the acute stages of hysteria and fanaticism.

Ordinarily The North American would not feel called upon to discuss seriously the utterances of a young woman who adopts as the premises for her public arguments flat, dogmatic denials of the incontestably proved truths of science and the vital statistics of all civilized nations.

But our legislative records prove only too plainly that the doctrine of which the attractive and plausible young woman from Sweden is a high priestess has found too many adherents for the safety of the community.

Only the veto of the Governor prevented this State from taking a long step back toward the dark ages by the passage of acts weakening the vaccination law and forbidding animal experimentation. And in the present session of the Legislature there already is proof, in the harmful Article XV. of the proposed public school law, that there is deliberate and organized purpose to force through legislation that will menace life and health and obstruct the progress of all preventive medicine.

Concerning the various horrors of the torture of helpless animals in laboratories, which Miss Lind-af-Hageby details to her shuddering audiences, we can say only that in the exhaustive investigations of the Royal Commission on Vivisection in Great Britain there was utter failure to substantiate similar charges. And in the most noted case that has reached the courts, the defendant, who had quoted from an anti-vivisection book, was condemned to pay \$10,000 damages and heavy costs, while the publisher withdrew the book from sale and made public apology to the libeled scientists.

Incidentally, the author of that book was Miss Lind-af-Hageby.

But it is easy to make arbitrary assertions and by dealing in generalities convey the impression that inhumane practices are prevalent. For most people do not know that there are only some forty laboratories in Germany, twenty in France, twenty in England, twenty in Italy and fifty in all other countries in which experiments on animals are made. An exceedingly large supposition would be the sacrifice of five victims a day in each of those 150 institutions.

Considering the fact that at least two thousand million mammals die every year—in this country alone we slay and eat 50,000,000 bees, sheep and hogs and 250,000,000 fowls annually—the number used for experimentation hardly seems to deserve the anti-vivisectionists' favorite term, "holocaust."

Let it be remembered also that under the carefully enforced British act of Parliament it was shown last year that of 73,000 operations on animals, 96.5 per cent. were inoculations or hypodermic injections of a wholly painless character, while the remaining 3.5 per cent. were effectively anesthetized, according to the sworn testimony of the government inspectors.

Such facts do not, however, apply to the theories of Miss Lind-af-Hageby, which we may summarize thus, in her own words:

I know that the torturing of a thousand dogs could never prevent the death of a single child.

I do not believe any benefit whatever can come to human beings through experiments made on animals.

I believe absolutely that all inoculation of children or grown persons with serum obtained from the diseased blood of animals is dangerous, and that in a large number of cases the serum introduced into the human blood is worse in its effect than the disease it is said to prevent or cure.

I do not believe that there has been any decrease in deaths from diphtheria since the introduction of the antitoxin.

Animal experimentation is wrong for two reasons: First, it is wrong to assume that man can in any way benefit by experiments made on animals.

In the second place, it is wrong because it is possible to arrive at just as conclusive results through chemical experimentation as through vivisection.

Now, apart from all recent discoveries in bacteriology, it is beyond dispute that all we know of the circulation of the blood, the processes of

digestion, the growth of bone and the motor centers of the brain are due directly to experiments on animals.

It was vivisection of what we may be asked to consider a "sub-human"—a tadpole, to be exact—that led to our modern effective methods of combating most forms of blood-poisoning.

It was vivisection and inoculation of animals that led to the discovery of tuberculin; of the serums, vaccines and antitoxins for lockjaw, rabies, cholera, plague, typhoid, cerebro-spinal meningitis, diphtheria. It was vivisection and animal experiment that aided in the discovery of antiseptics and anesthetics—the entire basis of modern surgery.

Surely none need be told that tuberculosis is not the hopeless curse it was. Were it not for animal experimentation, the prospects of ultimately lifting this great burden of suffering and death from the human race would be as dark as it was before Klencke, in 1843, and Villemin, in 1865, succeeded in proving its infectious nature by experiments on animals with tuberculous material, and thus paved the way for Koch's discovery, in 1882, of the tubercle bacillus. The many researches which have flowed from the study of this germ have taught us already how to protect the healthy from infection, and are daily teaching us how we may restore to health those already infected.

Concerning the calm assertion that no good has come of the diphtheria antitoxin, we have at hand indisputable statistics showing that in one country alone—France—the lives of 1,350,000 children have been saved in fifteen years.

In the words of Dr. Charles Richet, "this would be sufficient to justify the death of the twenty-five dogs and the 100 rabbits which I sacrificed, and of the 200 horses which Behring and Roux used for the preparation of the anti-diphtheria serum."

A little sense of proportion is an excellent thing. A hundred weeping mothers; a hundred children gasping vainly for breath, the hope of a hundred mourning homes dead in the cradle—are we to count these nothing beside a rabbit which has had to receive a little blood of a dog into its abdomen?

By animal experimentation yellow fever and the plague have been practically conquered. Meningitis is losing its terrors. We know how to prevent typhoid, and hope is strong that a cure for cancer may yet be discovered by the research that alone can make that possible.

Our wish is to refrain from anything resembling the violence with which the anti-vivisectionists preach their beliefs. Yet it is difficult to refrain from impatience when we read in one of their official publications this summary of the life-work of one of the greatest benefactors of the human race:

"Pasteur and his followers increased a very rare disease called rabies and are making fortunes out of the anti-rabic virus."

Read that and then remember that before Pasteur's day the mortality rate in the maternity hospitals of Europe of puerperal fever was 40 per cent. Remember that it was Pasteur who reduced that rate to the present one of 0.02. And then remember that there are women who now sneer at him who did more than any other to lighten "the curse of Eve."

Condemnation of Pasteur coming from a woman's mouth is an example of such ingrati-



tude that we say without reservation that the woman who assails his services to humanity must be motherless, childless, ignorant or bad.

We do not for a moment question the sincerity of the young woman we have quoted nor that of her sympathizers. We share their abhorrence of anything savoring of needless cruelty. We do question the accuracy of their knowledge, and consider them lacking utterly in sense of proportion and the true mercy that lies in sane humanitarianism.

We deny absolutely their contention that animal experimentation has accomplished no good, unless, in truth, "Life and Death and Motherhood be naught."

And to all we commend this thought of President Eliot, of Harvard: "Let me call your attention also to the fact that the humanity which would prevent human suffering is a deeper and truer humanity than the humanity which would save pain or death to animals."

### The Era of Cheerfulness.

(From the *National Magazine*, Sept., 1908.)

The era of cheerfulness was manifest at the great political conventions of 1908, and the photographers taking snap-shots insisted upon a smile from the subject and got it. Amid the storm of protest and the calls of "Time" at the conventions, did you not notice how the man who wore a smile usually obtained a hearing? Did you not perceive that the man with a message of cheerfulness was patiently listened to? All this foretells an atmosphere of good nature in the campaigns, for it is impossible to get "blood-mad" when the cohorts are all smiling as they did at the recent conventions. In fact, the "candidate smile" has become quite the popular facial expression. Most of the delegates went along broadly elated, probably expecting that the camera man might catch them at any moment. It is becoming unfashionable to talk of ailments and wailments; it is a happy change. Jeremiah and his lamentations have had a long inning, and now give way to Solomon and his Songs of Cheerfulness. Solomon, it will be observed, was a wise man. We no longer insist on the repetition of that old saying, "I am enjoying poor health."—*Joe Mitchell Chapple*.

## Reports from County Societies.

### BURLINGTON COUNTY.

George T. Tracy, M. D., Secretary.

The seventy-ninth annual meeting of the Burlington County Medical Society was held at Mt. Holly, N. J., on the evening of January 13, 1909. The occasion was also notable because it was the annual social reunion of the members and their families. Unlike former occasions, ladies of the town, connected with the Women's League, prepared and served the menu, and from this work they realized quite a sum for the benefit of the village nurse fund. The money usually paid to a caterer in serving the bill of fare was handed over to the ladies at their request, and they made good use of their opportunities. Nearly all members of the society were present. The ladies who waited on

the tables were dressed as nurses, and never was banquet more nicely served. The program consisted of vocal and instrumental solos and recitations. Addresses were made by the president, Dr. William H. Shipps, and Drs. Wendell Reber and John V. Shoemaker, of Philadelphia; and Dr. Daniel Strock, of Camden. The toastmaster, Dr. Enoch Hollingshead, was in happy vein, and added much to the interest of the occasion. The following officers were elected: President, William H. Shipps; vice-president, J. Edgar Haines; secretary, George T. Tracy; treasurer, Enoch Hollingshead; reporter, William P. Melchor; censor, B. K. Brick.

The following delegates were elected to other county societies: Camden, Drs. A. Marcy, Jr., and A. H. Small; Gloucester, Drs. E. C. Bullock and J. J. Flynn; Salem, Dr. F. G. Stroud; Bucks County, Pa., Dr. J. D. Janney.

### CUMBERLAND COUNTY.

J. H. Moore, M. D., Reporter.

The regular meeting of the Cumberland County Medical Society was held, January 14, 1909, at the Doughty House, in Millville. Papers were read by Dr. J. C. Dacosta, of Philadelphia, on "Clinical Types of Abdominal Enlargement;" by Dr. Wilmer Crusen, of Philadelphia, on "Causes of Disease in Women," and by Dr. W. R. Glendon, of Cedarville, on "Penetrating Wounds of the Abdomen and Their Treatment." Immediate operation was advised where there was any reason to suspect wounds of any of the viscera and was justifiable for diagnostic purposes as well. A successful case was cited when this method had been followed.

A committee was appointed to provide for lectures and other methods of instruction of the public in tuberculosis, and another committee to look after medical legislation. The president appointed on the first committee Drs. Joseph Tomlinson, E. S. Corson and H. G. Miller, and as the legislative committee Drs. Joseph Tomlinson, W. K. Elmer, J. W. Wade and H. G. Miller. Dr. W. Leslie Cornwell, of Bridgeton, and George S. Spence, of Leesburg, were elected members of the society. Dr. James Hunter, the district councillor of the State Society, was present, and Dr. George E. Reading as delegate from the Gloucester County Society.

### ESSEX COUNTY.

Frank Wilcox Pinneo, M. D., Reporter.

The William Pierson Medical Library Association met Tuesday evening, February 9th, to hear a lecture by Dr. Walter Leslie Carr, of New York City, on "Gastro-Intestinal Diseases of Children." The attendance, as usual at these meetings, was good and the interest in this course of lectures on Pediatrics was maintained.

The Newark Medical League held a regular meeting Monday evening, February 8th, to hear a lecture by Dr. Egbert Le Fevre, professor of clinical medicine at University and Bellevue Hospital Medical College, New York, on the "Significance of Abnormal Blood Pressure in Internal Diseases." That the generous invita-

tion widely extended by the League was appreciated was shown by the large number in attendance. A resolution was passed calling upon the Board of Directors of the German Hospital to reconsider their recent action in dismissing from the medical staff three physicians for alleged commercial reasons.

The Essex County Medical Society held a regular meeting in Newark Tuesday evening February 16th, to hear Dr. Haven Emerson, demonstrator of physiology at the College of Physicians and Surgeons, New York, deliver an address on "Laboratory Work in Physiology in Relation to Medical Practice." This lecture was a most excellent one and conveyed in a very lucid way the practical value to clinical medicine of experiments in pathological physiology. Dr. Emerson himself was unable, on account of illness, to be present, but Dr. Barringer, associated with him in this work, read his paper, and in a most acceptable way. Among the subjects treated were intra-cranial pressure and its effect in raising blood pressure, one result being the production of typical Cheyne-Stokes respiration; the effects of excessive (arterial) peripheral resistance, produced, as by massive doses of adrenalin, and resulting in a relative valvular and myocardial insufficiency; artificial myocarditis, showing the "extremely narrow range" of such a heart's power to respond to an extra load; the importance of a maintained uniform pressure in the capillaries, shown by the prompt stagnation of blood and emigration of leukocytes through the wall on the least injury or even pressure to the tissue. A lesson taught here, the doctor said, was the harm done in infections by administering alcohol and quinine, which, like, also, general anesthetics, are so detrimental to this power of the leukocytes and their phagocytic action. Another lesson from this failure of capillary pressure is in the use of infusions, for in extreme emergency a venous infusion with adrenalin would fail, not reaching the heart through the stagnant venous side of the circulation, while if given in an artery would reach the left ventricle at once, and by "mechanical pressure first and then the specific action of the adrenalin" would start again the heart and the whole circulation. Artificially produced bronchitis, it was shown, and pleurisy, followed by sudden thoracentesis, give valuable illustration of dangers to avoid. The oncometer applied to the kidney affords important help in studying the means of controlling kidney secretion. Finally, description was given of the use of the recording stromuhr of Professor Opitz, which by a moving piston, will reveal the profound effect on local venous output of such delicate influences as, e. g., distension of a part of intestine. The paper in full will appear elsewhere in this Journal. The president, Dr. Wells P. Eagleton, presided.

Ten new members recommended by the council were elected: Drs. Isaac Kupperman, 191 Spruce street; Henry B. Kessler, 14½ Norfolk street; Clarence R. O'Crowley, 12 Lombardy street; Oscar Porzer, 91 South Ninth street; E. W. Erler, 336 Sussex avenue; Henry A. Loux, 479 South Eleventh street; W. E. Hitchcock, 55½ Belleville avenue; Philip Garfield Hood; Israel J. Rachlin, all of Newark, and R. T. Atkins, 512 Central avenue, East Orange.

An amendment to the constitution was proposed, making it the duty of the council to "systematically endeavor to promote friendly intercourse among physicians and shall continue these efforts until every physician in the county eligible for membership has become united to the society."

Another amendment will make it the duty of the secretary to keep a list with complete data of all licensed practitioners in the county.

A resolution introduced by the council was as follows:

"Since the Essex County Medical Society is informed on good authority that the Directors of the German Hospital have discharged for commercial reasons, three members of the staff; therefore, be it

"Resolved, That the Directors of the German Hospital be and are hereby respectfully requested to reconsider this matter and make such amends as honor and justice demands.

"Resolved, That the society consider the action of said Directors derogatory to the good name of a profession notable for its charitable and unselfish work.

"Resolved, To send a copy of these resolutions to the Board of Directors of the German Hospital."

The minutes of the Board of Directors of the hospital were produced, stating other reasons for their action than those alleged above, which were "failure to produce allotted revenue for the hospital." Motion to consider by sections prevailed. Each succeeding one was carried by an increasing vote and finally the whole adopted as above by an overwhelming majority.

Essex County was well represented at Trenton at the hearing on the osteopath bills, and under the leadership of the president, Dr. Eagleton, is making the members of the Legislature learn emphatically the views of our members and their reasons for opposing the bills.

## HUDSON COUNTY.

### August Adrian Stasser, M. D., Reporter.

The regular meeting of the Hudson County Medical Society was held at Lincoln Hall, Jersey City, on February 2d, 1909, the president, Dr. Mooney in the chair. A fair attendance was reached.

Before entering into the work of the evening the president felt called upon to remark to the members who had cases to report that he hoped the unfortunate occurrence that followed the last meeting did not take place again, inasmuch as the newspapers of the few days after the meeting were full of accounts of the report of a case detailed to the members and in such minuteness that the suspicion was well-founded that the report had been edited by some one who was well versed in the technical merits of the case.

Under the head of interesting cases, Dr. Chambers demonstrated a man with an apparent laryngeal cough, the origin of which was by no means clear. He had an obstructive rhinitis, but no paralysis of the rima. Six years ago Dr. Janeway had made the diagnosis of aneurysmal dilatation of the aorta probably of a specific character. He complained of dysphagia, and an annoying cough when arising in the morning. The larynx was normal to in-



spection, but the epiglottis was distorted, pyramidal in shape. The aneurysm gave very indefinite symptoms now. All he could do was to advise a strong mixed treatment. In the discussion Dr. Purdy said that he knew that three years ago the bruit was very marked in this case.

Dr. Faison reported six cases of intestinal obstruction in children all diagnosed as intussusception, five of them rightly so. There were five deaths in the series. Yesterday he had seen one on the left side, where he had succeeded in getting a reduction only by more force than he had ever before attempted to use. This case was aggravated by the presence of pertussis. He had also recently met a case of so-called spastic contraction of the bowel—spastic or dynamic ileus, which Murphy claims is usually due to poisoning by lead or paratoxicon. Another condition of peculiar moment was one he had recently met where in an operation for ectopic gestation he found blood continually trickling down behind the cecum. In tracing it out it was found to be coming from the lesser peritoneal sac through the foramen of Winslow.

Dr. Dickinson detailed a case where the patient, now forty years of age, had had even before puberty a very much enlarged thyroid. This in the last twelve months had rapidly increased in size and several attacks of thyroïdism had supervened with the usual clinical features. An operation was planned and carried out in the interval, a partial right-sided thyroïdectomy. In the matter of intussusception he had in a recent case felt that a twenty-four hours' wait was necessary, as the condition of the child was far from promising. The patient was removed into the care of some Faith Curists where the child promptly passed away.

Dr. Pyle said that at the last meeting of the society Dr. McMurra had put on record his cure of alcoholism. A case of the disease having presented itself for which the usual remedies seemed inadequate, Dr. Pyle decided to try the formula as published in my report to the Journal of the State Society. Not only was there no effect of the expected kind, but there developed a typical ether "drunk." The case was then transferred to a proprietary cure establishment where in a week a satisfactory condition was attained.

Dr. McLoughlin stated that he wished particularly to call attention to Rosenberger's work in tuberculosis, especially its early recognition. The theory on which he worked was that tuberculosis was at all times a bacteremia. His method of procedure was as follows: 5 cc. of the suspect's blood was taken from the vein and put into 10 cc. of 85 per cent. saline solution to which 2 per cent. of sodium citrate solution was added. This was set aside in the refrigerator for twenty-four hours, the sediment then transferred to a slide, fixed by heat, washed with water and then stained with the usual carbol-fuchsin and counterstains. He is thus able to show the presence at an early stage of the infection.

Dr. Purdy said that inasmuch as malaria was rare at this time of the year he wished to report such a case that presented unusual features. The patient was a woman four and one-half months pregnant, who had not been outside of the confines of the city for over a year. She developed chills and fever. Blood exam-

ination revealed that the plasmodium malariae was present.

Dr. Swiney showed a fever chart of a case of first right, then left, sided pneumonia, in which the peculiarity was the low temperature curve and the relatively high respirations and pulse.

Dr. Finn commented on the phenomena of multiple fetation and related a case of triplets and the findings. The mother was thirty-five years old and a VIII-para. The first fetus came vertex, as did the second also; the third had to be delivered by podalic version. They averaged about five to six pounds in weight. He commented on the rarity of the condition, inasmuch as Veit's statistics showed that the birth of triplets occurred about once in 7,900 cases, while twins were found once in every 89 cases. He went into the theory of the formation of the multiple fetation. In his case two of the three died in the first sixteen days. He also reported a case of double Colles' fracture, contracted by a fall while hanging up wash. He considered the reduction of the impaction the most essential point in the treatment of this surgical condition. This accompanied with early massage had worked very well in this and other cases.

Dr. Rosenkrans related one of many cases of extreme faucial irritation, septic in character, which he had seen in scarlatina. These cases in his experience had invariably had a fatal ending. Reasoning that the invasion entered from the posterior choanae he began the active cleansing of this region and used for this purpose a fifty per cent. resorcin solution, and after three or four days' treatment he had seen very gratifying results.

Dr. Rector reported the results of eleven cases of Colles' fracture treated by the moulded splint of plaster of Paris. Also a case of traumatic hernia due to a fall and where the patient came to operation at a time when the tissues could be seen to give evidence of a recent injury.

Dr. Goldstone detailed work done in the matter of the cutaneous reaction of tuberculosis and passed about the scarificator and the capillary tubes of tuberculin used to produce the test.

The paper of the evening was entitled "The Acute Inflammations of the Middle Ear," and was read by Dr. Koppel. (This has been promised for a later issue of the Journal.)

The discussion was led by Dr. Bull. He did not quite agree with the essayist on his classification and considered one based on anatomical lines the only right one. Two tissues entered into the pathological considerations—the mucous membrane and the basement membrane of the tympanum. When the mucous membrane of the tube was involved the condition was one of tubal catarrh; when the mucous membrane of the tympanic cavity was secondarily affected we then had a tubo-tympanitis. If in addition the cellular tissue was involved, then there resulted a pure tympanitis. If the inflammatory process invaded the folds of mucous membrane that hung in the attic of the tympanum, then pus was formed and an acute purulent otitis existed. As to the treatment if there is bulging of the drum due to catarrhal products a paracentesis was always indicated so as to establish free drainage. Hot irrigation was a very valuable therapeutic measure. There was at present, however, a difference of

opinion whether during active inflammation the catheter was not preferable to the Politzer method of inflation.

Dr. Chambers agreed with the last speaker's classification and spoke particularly of the hot irrigation of the ear, especially in impending mastoiditis. Leeches are of great advantage but are only reluctantly used by most patients. Early paracentesis with a full incision was of the greatest importance. He often used the treatment advocated by Noyes of using the powdered boric acid in the ear to absorb the discharges. He touched upon the newest instrument to irrigate the ear—the Fowler apparatus.

Dr. Jacquemin detailed his own classification of middle ear diseases. The catarrhal type he preferred to call a transudative otitis; in this case gentle inflation usually dislodges the transudate. If, however, bacterial invasion follows, then we have exudation; and if to that is added cellular exfoliation the condition is one of purulent otitis. He was unalterably opposed to the use of the ice-bag. A perfect paracentesis was the most important step in the treatment of almost all middle-ear diseases. He did not approve of the use of powder in the external auditory canal. He expressed surprise that no one had brought out the value of the Bier hyperaemia treatment for threatened and existing mastoiditis. Dr. Koppel closed the discussion.

The chairman of the legislative committee, Dr. Rector, reported what had so far been done by the committee. He exhibited copies of Senate Bill 47, Assembly Bill 28, in re pathological societies, and the most important one, the Assembly Bill 81, the new osteopathic measure. He also as a member of the scientific committee of the State Society suggested that the names of papers to be read at the next meeting and a synopsis of the contents be forwarded as soon as possible.

Dr. Brinkerhoff, as a newly-appointed member of the State Sanatorium for Tuberculosis at Glen Gardner, asked the members to give expression to their opinions as to the wisdom of the move to take chronic or incurable cases on a part of the sanatorium grounds. The question was fully discussed by the members present and the consensus of opinions was that each county had better provide some place for its own incurables. Dr. Pollak said that the arrangements had now been made to take a certain number of incurable cases at the old almshouse at Snake Hill, but the accommodations were not adequate for the care of any but male patients at present, and that only in small numbers. He also reported that a lung clinic would be established shortly in lower Jersey City and he intended to there try the early diagnosis after the method of v. Pirquet.

The resignation of Dr. Clara De Hart Krans was accepted. New members elected were Dr. Ernest Thumm, 623 Avenue D, Bayonne, and Dr. J. L. Mathesheimer, 106 Grand street, Jersey City.

The society then adjourned. A social session followed and a light collation was enjoyed by those who attended.

Success does not so much depend on external help as on self-reliance.—*Abraham Lincoln.*

## GLOUCESTER COUNTY.

**Howard A. Wilson, M. D., Reporter**

The annual meeting of the Gloucester County Medical Society was held at Paul's Hotel, Woodbury, January 20. The attendance was smaller than usual, but much interest was manifest.

La grippe, measles, typhoid fever, scarlet fever and pertussis were reported as prevailing in some sections of the county. Pneumonia as a complication of la grippe has been frequently noted.

Dr. Judson Dorland, of Philadelphia, read a very instructive paper on Leprosy, illustrated with lantern slides of cases seen by himself in the Leper Colony at Samoa.

Dr. Joseph E. Hurff also read a paper on Leprosy, giving a very thorough graphic account of the case under his care in the Camden County Hospital at Blackwood.

The secretary was directed to extend the sympathy of the society to Dr. E. T. Oliphant with hopes for his speedy recovery.

The following officers were elected:

President, Charles D. Pedrick, Glassboro; vice-president, C. B. Phillips, Pitman; secretary and treasurer, George E. Reading, Woodbury; reporter, H. A. Wilson; censors, H. A. Stout, James Hunter, Jr., L. M. Halsey.

Delegates to Camden County, H. A. Stout, C. S. Heritage, J. G. Edwards, H. B. Diverty and H. A. Wilson.

Delegates to Cumberland County, B. F. Ogden, George E. Reading, C. F. Fisler.

Delegates to Salem County, H. A. Stout, E. M. Duffield, William M. Stratton.

Delegates to Atlantic County, George E. Reading, L. M. Halsey, William Brewer.

Delegates to Burlington County, George M. Laws, H. A. Stout.

Delegate to Medical Society of New Jersey, Charles S. Heritage.

Drs. Doland, J. E. Hurff, S. F. Stanger, E. E. DeGrofft, Emma Richardson, Daniel Strock, William H. Iszard and Rev. Herbert Burk were present as guests and visiting delegates.

## SALEM COUNTY.

**John F. Smith, M. D., Reporter.**

The quarterly meeting of the Salem County Medical Society was held at French's Hotel, on Wednesday, February 3, 1909, with a large attendance and an unusually interesting gathering of the profession.

The society had as its guests, Dr. Henry R. Wharton and Dr. Charles P. Noble, of Philadelphia; Dr. Nicholson, Dr. Paul McRay, president of the Camden County Medical Society, and Dr. W. H. Iszard, of Camden; Dr. James Hunter, of Westville, who is counsellor for this district of the State Medical Society; Dr. Clarence Garrabrant, of Atlantic City; Dr. W. M. Stratton, of the Gloucester County Society, and Dr. C. W. Thomas, of Woodstown.

Dr. Wharton read an interesting paper on "Symptoms Simulating Appendicitis," with remarks by Dr. Noble along the same line, the paper calling forth a general discussion of practical value to the profession.

The members of the society present were Dr. John M. Summeril, president, Pennsgrove; Dr. H. Chavanne, secretary; Drs. W. H. Carpenter,



R. M. A. Davis, N. H. Hires, J. F. Smith, W. H. Hillard, C. M. Sherron, Francis Bilderback, Salem; Dr. E. E. DeGrofft and Dr. E. P. McGeorge, Woodstown; Dr. W. L. Ewen, Alloway; Dr. G. W. Fitch, Daretown; Dr. F. D. Husted, Quinton; Dr. W. H. James, Pennsville.

### SOMERSET COUNTY.

#### C. R. P. Fisher, M. D., Secretary.

At a regular meeting of the Somerset County Medical Society held at the Ten Eyck House, in Somerville, on February 11th, 1909, the chair was occupied by Dr. W. H. Merrill in the absence of the president and vice-president. A vacancy in the Committee on Legislation, caused by the resignation of Dr. C. R. P. Fisher, was filled by the appointment of Dr. A. L. Stillwell. The following resolution, offered by Dr. J. P. Hecht, was carried:

Whereas, It has come to the knowledge of the Somerset County Medical Society that the Directors of the German Hospital of Newark has dismissed three members of its staff because they considered that these physicians did not have private patients enough in the institution; and,

Whereas, We are informed that there has been no question as to the present or past good work and capability of the gentlemen dismissed, or of their personal or professional character, be it

Resolved, That, in the opinion of this society, this action of the Directors of the German Hospital of Newark is a direct insult to the physicians dismissed and to our profession, and a crime against public morality.

Resolved, That the adoption of these resolutions authorizes the secretary of this society to give them such publicity as seems proper in the interests of high standards for our profession and professional work.

A paper on "A Common Mistake of the Busy Practitioner," was read by Dr. J. H. Buchanan, and discussed by Drs. Hecht and Fisher. The application of Dr. D. F. Weeks, of the State Epileptic Village, was received and referred to the Board of Censors.

### Miscellany.

#### The Relation of the Medical Profession to the Alcohol Question.

(From the *Medical Record*, Nov. 28, 1908.)

To the Editor of the Medical Record.

Sir: The writer is hardly in accord with Dr. Jacob's criticism of professional writing on alcoholism in the lay press, for it really seems as if the general public is calling on the medical profession to make a more definite statement as to the physical effects on the human body of the moderate use of alcohol than has yet been declared. Nevertheless, it seems as if a medical symposium of opinion of some value could be created, using the medical press as a medium.

It is somewhat remarkable that so general a harmony of opinion among medical men has been arrived at during the past twenty years on many related branches of the subject. There are still, however, opinions held by a few that are fairly twenty-five years behind the age. It

is a matter of surprise that, in the face of advanced knowledge as to the possibilities of supporting methods of nourishment, any medical man should make the statement that a radical immediate cutting off of alcoholic beverages would result in race decadence. It is true that there may be a very few individuals who would retrograde or cease to exist when cut off from alcohol; but most persons, if properly nourished at the time of the cutting off of the alcohol, as a rule, would be physically benefited. To be sure the cutting off of the supply would create temporary wide-spread suffering, due to the hunger for alcohol; but there are very few individuals indeed who would not be immediately benefited if intelligently treated, and it is questionable if the world would not be well rid of the few whose existence would be cut short by a public invasion of the individual rights of indulgence.

We all hold together on the advantage of using alcohol under certain conditions of ill health. We all hold that under such conditions the good to be gained from its use overbalances the injury it effects; but we want a general discussion of the following propositions, namely: (1) The habitual use of alcohol in small quantities which to superficial observation does no harm, really does physical damage by inducing a habit of dilatation of the arterioles with secondary results due to throwing undue arterial pressure on various organs. (2) That any individual using alcohol even in small doses is in the grasp of the alcohol habit, and is injured in proportion to the amount ingested and to the regularity of indulgence. (3) Under all ordinary conditions of health any physical advantage due to the pleasure of indulgence or to the nutritive effects of alcohol is far outbalanced by its evil effects, which are not perceived immediately, but are cumulative. (4) That the primary physiological effect of apparent stimulation is only the beginning of paralysis due to the coagulative effect of the alcohol on cell peripheries, and that deepening of the effect to the cell centers reduces vital activity in the cell. (5) That so-called moderation results in the vast majority of cases in indulgence that is measurably immoderate, and usually shortens life, and weakens self-control.

The question that is now before society for its decision is whether society must suffer the consequences of the grossly ignorant and damaging use of alcohol, in order that those who are only slightly hurt by moderate indulgence may be allowed the pleasures of that indulgence; whether this agent is to remain in force as one of the influences for ridding the world of those least fit to survive, or whether this substance, so potent because of its peculiar properties, is to be placed with things too dangerous for general use.

J. M. W. KITCHEN, M. D.  
East Orange, N. J.

#### Joint Resolution in Relation to the Campaign Against Tuberculosis.

Whereas, Tuberculosis by its widespread distribution throughout this Commonwealth is causing untold suffering and distress, is affecting the health and prosperity of our citizens, is draining the resources of individuals, and causing appalling waste of human life; and

Whereas, Modern science has demonstrated the possibility of minimizing this disease by meas-

ures of education, sanitary supervision, isolation and early medical treatment; be it

Resolved, By the Senate and General Assembly of the State of New Jersey:

1. The Governor of this State be, and he hereby is, authorized to appoint a commission of five persons, two of whom may be women, citizens of New Jersey, to arrange for and carry into effect a public meeting or meetings to be held in the city of Trenton or elsewhere; to arouse the attention of the people of the State to the importance of the campaign against this preventable disease; to investigate how far the needs are being met by existing agencies and institutions and what new forms of educational efforts shall be advisable; to report on the advisability of isolation camps, and to take such other steps as may be practicable to assist in the progress of this important campaign.

2. That the said commission shall serve without compensation; they shall meet at the State House in the City of Trenton or in such other places as they may deem advisable, the times and places to be agreed upon by them, and shall report to the Governor and Legislature their acts and conclusions on the subject, with such data as they may gather.

3. The sum of fifteen hundred dollars is hereby appropriated for the purpose of paying the expenses of said commission, payable to the treasurer, on warrant of the Comptroller, upon voucher duly certified and approved by the chairman of the commission.

4. This joint resolution shall take effect immediately.

A supplement to an act entitled "An act making appropriations for the support of the State Government, and for several public purposes, for the fiscal year ending October thirty-first, one thousand nine hundred and nine," approved April 16, 1908.

Be it enacted by the Senate and General Assembly of the State of New Jersey:

(1) The sum of fifteen hundred dollars be, and the same is hereby, appropriated out of the State fund for the purpose of carrying out the provisions of joint resolution No. — of the session of nineteen hundred and nine, approved ....., nineteen hundred and nine.

(2) This act shall take effect immediately.

### The Responsibility of the Family Physician Toward Tuberculosis.

S. A. Knopf says that any physician who is able to make in a given case a definite diagnosis of tuberculosis should inform the patient and his family. The course of treatment as to climate, diet, etc., must depend on circumstances, but the usual prophylactic measures should be begun at once, whether the patient remains at home or not. If the law requires registration, this should be done. Very sick cases should not be sent away from home. Care should be taken in regard to the children of a tuberculous parent who remains with them. The choice of a future career often determines whether young people will or will not have the disease. Thus the son of a consumptive printer should choose some other occupation. The daughter of a tuberculous mother should never be a seamstress. Tuberculous patients should not marry. At the present time they will, in spite of all advice, and if the laws of one

State prevent it they will simply move to an adjoining State. If a tuberculous woman becomes pregnant, emptying of the uterus may be justified to preserve the mother's life. But prevention of pregnancy is better and the author deems it justifiable to advise it. There is no need of turning the treatment over entirely to the specialist. The family physician should be able to meet every requirement. Knopf deems it a great error to hand patients over entirely to faith healers of all kinds, Emmanuel movement men, etc., though the hopeful methods and measures of such persons are highly commendable.

### After Christian Science.

The annual report of the Massachusetts State Board of Registration in Medicine states that a definition of what constitutes the practice of medicine and a practitioner of medicine is most important, and is included in the medical practice laws of most of the other States, and the passage by the Legislature of an amending section, as follows, is strongly urged: "Persons shall be considered, irrespective of methods of practice, as practising medicine within the meaning of Chapter 76 of the revised laws who shall assume or offer to assume the responsibility of determining the nature of disease, deformities or injuries to the human body, having in view the treatment of the same for the purpose of cure or alleviation." An attempt to enact a similar amendment last year called forth strong opposition from the Christian Scientists, and the Committee on Public Health finally recommended "no legislation necessary."

### COLUMBIA UNIVERSITY LECTURES.

#### Sanitary Science and Public Health.

A series of lectures were arranged for the months of February, March and April. During February lectures were delivered by W. T. Sedgwick, Ph. D., on "The Rise and Significance of the Public Health Movement;" J. George Adami, M. D., L.L.D., on "The Great Pathological Discoveries and Their Bearing Upon Public Health Problems;" Professor Sedgwick, on "Sanitary Science: The Control of Environment;" William H. Park, M. D., on "Modes of Transmission and Methods of Prevention of Communicable Diseases;" John S. Billings, M. D., LL.D., on "The Beginnings of Organization for Public Health Service;" W. H. Burr, C. E., on "Water Supplies and Sewage Disposal;" F. L. Hoffman, on "Factors Influencing the Health and Death Rate of Cities."

The following are the lectures during March and April, to be delivered on Mondays and Wednesdays at 5 P. M., in the large lecture room, College of Physicians and Surgeons, 437 West Fifty-ninth street. They are open to the public up to the capacity of the hall. No tickets of admission are required, but the doors will be closed at 5:10 P. M.:

March 1—"Reinforcement of Vital Resistance," by Simon Flexner, M. D., D. Sc., Director, Rockefeller Institute for Medical Research."

March 3—"Public Health Problems of the Municipality," by Thomas Darlington, M. D., President and Commissioner, New York City Health Department.



March 8—"Public Health Problems of the Municipality," continued, by Walter Bensel, M. D., Sanitary Superintendent, New York City Health Department.

March 10—"Public Health Problems of the State," by Eugene H. Porter, A. M., M. D., Commissioner of Health of the State of New York.

March 15—"Public Health Problems of the Nation," by Walter Wyman, M. D., LL.D., Surgeon-General, Public Health and Marine Hospital Service of the United States.

March 17—"Milk Supplies and Public Health," by Dr. Park.

March 22—"Infant Mortality and Its Reduction," by L. Emmett Holt, M. D., Sc. D., Carpentier Professor of the Diseases of Children, Columbia University.

March 24—"The Prevention of Tuberculosis," by Hermann M. Biggs, M. D., Chief Medical Officer, New York City Health Department.

March 29—"School Hygiene and Sanitation," by John J. Cronin, M. D., Assistant Chief, Division of Child Hygiene, Borough of Manhattan, New York.

March 31—"Street Cleaning, Garbage Collection and Refuse Disposal," by Dr. Walter Bensel.

April 5—"Quarantine and Disinfection." (Lecturer to be announced later.)

April 7—"Tenement House Sanitation." (Lecturer to be announced later.)

April 12—"Diseases of Animals Transmissible to Man—The Relation of Insects to Disease," by Theobald Smith, M. D., LL.D., Fabyan Professor of Comparative Pathology, Harvard University.

April 14—"Personal Hygiene and the Hygiene of Communities (Gymnasias, Public Baths, Playgrounds), etc.," by Luther Halsey Gulick, M. D., Chairman, Playground Extension Committee, Sage Foundation, New York.

April 19—"Industrial Hygiene and Sanitation—Factory Inspection, Dangerous Trades, Preventable Accidents, Child Labor," by Mr. Hoffman.

April 21—"The Prevention of Alcoholism and Insanity," by Frederick Peterson, M. D., Professor of Psychiatry, Columbia University.

April 26—"Visiting Nursing and Its Influence on the Prevention of Disease," by Richard Clarke Cabot, M. D., Instructor in Clinical Medicine, Harvard University.

April 28—"The Influence of Education on Public Health," by Homer Folks, Secretary, State Charities Aid Association, New York.

**The American Journal of Surgery** presents in its March issue an exceedingly interesting and practical series of original articles contributed by prominent New York City surgeons. The following subjects are treated: A New and Simple Method of Intestinal Anastomosis, illustrated, by Dr. H. Lilienthal; Sigmoiditis and Perisigmoiditis, Dr. J. P. Tuttle; Sacral Suspension of Uterus—A New Technique, Dr. J. V. D. Young; Cancer of the Breast, Dr. Willy Meyer; Modified Operation for Inguinal Hernia, Dr. A. S. Sellenings; Localization and Removal of Foreign Bodies with Especial Reference to Those in the Skeletal Tissues, Dr. W. M. Brickner; Operation for Direct Blood Transfusion, Dr. J. A. Hartwell; Plastic Mastoid Operation—New Method of Operating in Acute Mastoiditis, Dr. T. F. Hopkins; Dislocation of the

Cervical Vertebrae, illustrated, Dr. J. P. Warbasse; Surgery of the Pericardium and Heart, Dr. H. B. De Latour; Fibrosis Uteri and Its Surgical Treatment, illustrated, Dr. S. W. Bandler; Laryngeal Stenosis in the Adult, Successfully treated by incubation, Dr. W. K. Simpson.

(This is an exceptionally good number, worthy of a wide circulation. We congratulate both the Journal and Dr. Warbasse, who has recently been added to its editorial staff. His excellent work as editor of the New York State Journal has been generally acknowledged.—Editor.)

## PRIZE ESSAYS.

These prizes were instituted by the Medical Society of New Jersey at the annual meeting in 1905, and are open for competition to the members of the Component County Medical Societies.

The subject chosen this year is:

THE SYMPTOMS, ETIOLOGY, PATHOLOGY AND TREATMENT OF EXOPHTHALMIC GOITRE.

Each essay must be signed by an assumed name and have a motto, both of which shall be enclosed in a sealed envelope, containing the author's name, residence and component society.

The essay shall contain not more than 4,000 words and must be characterized by originality in investigation and thought, and by clearness and conciseness of expression, and be, in the judgment of the Committee, of decided value to the members of the Society and to the profession generally. Failing in these respects no reward will be made.

The essays, which must be type-written, with the sealed envelope, must be placed in the hands of the committee on or before the first day of May, 1909.

The Committee will select the first two essays in order of merit. To the first will be awarded the prize of one hundred dollars, to the second fifty dollars.

The unsuccessful authors will receive back their essays upon their identification to the chairman of the Committee. The successful essays will be the property of the Society and will be published in the Journal.

CHARLES T. KIPP, Newark, Chairman.

DAVID C. ENGLISH, New Brunswick.

STEPHEN PIERSON, Morristown.

Committee.

**New Members of the American Medical Association from New Jersey.**—F. E. DuBois, North Plainfield; Michael S. Granelli, Hoboken; Henry Lindenbaum, Hoboken; William J. Matthews, Hoboken; David B. Pinder, Hoboken; George B. Spath, Hoboken.

# THE JOURNAL

OF THE

## Medical Society of New Jersey

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MARCH, 1909

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 252 Main Street, Orange, N. J.*

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### HIGHLY IMPORTANT.

**We appeal to every member of our Society to see or write to his County Senator and Assemblymen at once urging them to vote against:**

**Assembly Bills Nos. 81 and 101, which improperly favor Osteopathy, and the Optometry bill.**

**To vote for:**

**The State Department of Health Act, and a bill regulating the practice of Osteopathy to be presented by the physicians of New Jersey.**

**Have it clearly understood that what we ask is not for the benefit of the medical profession but solely for the good of the people and the credit of our State.**

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The Committee on Publication desires to express its thanks to those members of the Society who have so promptly complied with the request to return copies of the January issue not needed for preservation. We have now on hand more than enough to meet the deficiency and if any members have exercised special self-denial in thus parting with their journals, we can return a limited number, if application be made to the chairman of the committee.

Wm. J. Chandler, Chairman.

A valuable paper by Professor E. A. Spitzka, M. D., read before the Gloucester County Society, will appear in our next issue. We thank Secretary Reading for securing and forwarding it. Late matter requiring early insertion compels us to delay giving Dr. Dodge's paper and other items intended for this issue. They will appear in the April issue.

We regret that in our last issue of the Journal we gave the "Report of a Case of Pulmonary Embolism Following Injection of Salicylate of Mercury in Albolene," by Dr. E. H. Eising, of New York, without giving credit to the American Journal of Surgery, from the January issue of which it was taken. In setting up the article the footnote giving credit was, by mistake, omitted by the typesetter, and the very unusual delays under great pressure of work, in changing printing offices, caused us to overlook the omission in proof-reading. We never intend to use articles communicated to other journals without giving full credit, and apologize for this exception. In this case it should have been given at the head of the article.

### HOSPITAL CONTROL IN ITS RELATION TO THE STAFF.

We are sorry to be obliged to call attention again to the indignities shown to medical men by the authorities in charge of some of our hospitals—the last source whence should come lack of consideration and of fair, decent treatment. The immense amount of time and professional skill freely given by the members of the medical staff, without compensation, and the fact that the value and success of their services in no small degree gives to the institution its standing and commends it to the moral and financial support of the public, should spare them from such indignities on the part of the governing body of a hospital as those to which Drs. Seidler, Seidman and Hexamer, of Newark, have been subjected. The action of the directors of the German Hospital at Newark, as set forth in an article given in another column of this issue of our Journal, merits not only the resentment of the medical fraternity of that city and of Es-



sex County, but the condemnation of the profession generally, if, as has been stated, the ground for the discharge of these three members of the staff was not because of any dereliction of duty or lack of professional skill, but because they did not aid in producing revenue to the hospital by bringing their private patients to the institution for treatment.

Can it be possible that the governing authorities of any hospital will arrogate to themselves power to regulate the management of the private patients of members of its staff and presume to dictate how these members shall conduct their business affairs—how and where they should treat their patients, which is a matter entirely between the physician and his patient? We most emphatically dissent from any such view of the duties of a member of the staff; it does not come within his province to provide for the running expenses of the hospital in this or any other way. If the directors of the institution are not competent, or have not sufficient influence with the public to secure adequate support, other methods should be resorted to than that of compelling the medical staff to do their work and supply the lack. We commend the action of Drs. E. J. Ill and C. J. Kipp, consulting members of the staff, in protesting against the action of the directors in this matter and in resigning from the staff. We question—how could any member continue on the staff, or any physician accept a position on it? To be sure osteopaths might consent; we do not see how Christian Scientists could.

In Paris recently a physician was arbitrarily dismissed from a position in the customs service which he had held for many years because of his political attitude. The syndicate of physicians in the neighborhood decided unanimously that none of its members would accept the position which had been so long and so acceptably filled, regarding this "abrupt discharge as a violation of liberty of opinion altogether unworthy of a republican government."

We refer also to another case of injustice to medical men in conducting hospitals, and it is a singular coincidence that it is again the GERMAN HOSPITAL, and indicates that our professional brethren on the Pacific slope are not exempt from the trials that we experience in the East. The German General Benevolent Society having been founded, it was deemed proper that a hospital should be built as a part of its work. A grand building to accommodate over 200 patients was erected. After a while some objectionable features in its conduct aroused a spirit of resentment and antagonism of the majority of the profession. The abuses are illustrated by a case referred to in the California State Journal of Medicine, substantially as follows: A patient consulted a physician in San Francisco and a surgical operation was advised; the patient was referred to a surgeon who happened to be a member of the German Hospital staff and he confirmed the diagnosis and advised operation; a proper fee of several hundred dollars was to be paid the surgeon, the patient being abundantly able to pay it. A short time elapsed and the patient in the interval learned that by becoming a member of the Benevolent Society he could secure surgical attention free, or on paying the nominal monthly charge. He did so and the very surgeon previously consulted was called upon to operate—for nothing! The California Journal well says in commenting on this case:

In the first place, the surgeon was deprived of his honest fee; a fee which the patient could afford to pay. In the second place, the physician who referred the patient to the surgeon has lost a patient, for he may now receive all medical attention at no greater expense than the payment of his dues to the society. In the third place, the hospital itself has lost money, for the patient paid less for hospital expenses than he otherwise would have paid—and which, be it remembered, he could afford to pay. In the face of facts illustrated by this case (and many others of a similar character might be mentioned) is it to be wondered at that physicians resent the occurrence of such incidents and the existence of an institution which permits them? Several hundreds of dollars were diverted from the regular course into the pockets of the surgeon and no one—save the patient

in question—profited by the transaction; and he did not need or require the profit.

There can be no question as to the gross injustice to the profession of such cases. In this instance it was a hospital run by a benevolent organization where the evil may be more difficult to correct. In hospitals supported by the State, or by private, church or general public benevolence, the rules should prevent the defrauding of the profession, or the gross abuse of State or other charity by those who are abundantly able and ought to pay for medical or surgical treatment.

## OSTEOPATHY AND OPTOMETRY

The Osteopathic bill No. 101 should be buried out of sight and No. 81, though much safer, is decidedly objectionable. We do not believe in any bill recognizing and licensing this unscientific cult, but if we must compromise in this matter of a high scientific educational standard for the protection of our citizens, let us have the bill to be introduced in Senate by Senator Frelinghuysen.

The bill for the regulation of the practice of optometry is even worse—high school education and three months' study in the office of an optometrist as its requirements—that is preposterous, jeopardizing not only the sight, but in many cases the lives of our people. Shall men be legally authorized to correct errors of refraction and anomalies of the accommodation, who have no knowledge concerning diseases often associated with or causative of those conditions—glaucoma. This bill should be strenuously opposed and should be defeated by an overwhelming majority. There ought to be no difference of opinion among intelligent men who are not doctors.

Our legislators are being strongly tempted to open the flood-gates of bills legalizing every form of quackery. Soon we may have separate bills for legalizing faith-curers, Eddyites, and why not a separate board for each branch of special

practice—surgery, gynecology, ophthalmology and all other ologies?

## THE LEGISLATOR'S RESPONSIBILITY.

Are our lawmakers and politicians devoid of all sense of responsibility for legislation affecting the health and lives of the citizens of New Jersey? The outcome in the discussions and "hearings" on some of the harmful or vicious bills in the present Legislature will answer that question more positively than those of any legislative session for many years past, for we recall none where so many objectionable bills were introduced. We can now only refer to those involving the health interests of the State, which, with the moral, are the two of transcendent importance.

Ignorance as to measures or methods required might be excusable, if the ordinary legislator, who is not supposed to be versed in the principles and laws which medical science lays down as essential was compelled to trust his own judgment. But when medical men—the only ones capable of advising—lay before him these principles and laws, and he decides exactly opposite, and votes for laws which are positively harmful or will utterly fail to meet requirements, what shall we say? What can we say but that he deliberately assumes tremendous responsibility? He knows that the great mass of people are as ignorant (or more so) as himself concerning disease (and the qualifications of men to treat disease)—its nature as well as its control and prevention, and it is his duty as a lawmaker to protect them against even the results of their own ignorance and the quack who would take advantage of it.

When they decide directly against the true and disinterested judgment of the only competent men and enact laws which are harmful, we ask are they not morally criminal and do not the deaths resultant from such laws make them chargeable mor-



ally—is it too harsh to say—for those deaths? Especially when they dare to make legislation affecting public health a matter of party politics and then place in power under those laws—not men trained in the science and art which their proper administering requires, but politicians without any such training?

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We have referred several times to the Board of Health bill passed last year and to the belief of very many that it was one of the most conspicuous instances of political legislation, affecting the most important and sacred departments of our State's administration.

A bill has been introduced in the Legislature this year to correct this most objectionable law and prevent damage to our State and its citizens. It has been approved by many able sanitarians and has been endorsed by the Board of Trustees of our State Medical Society. Its provisions have been carefully studied so as to be in harmony with the latest approved methods of administration adopted in this country and abroad—its leading features being the creation of a department of health with a commissioner of recognized attainments who is to be held largely responsible for proper, efficient service, and an advisory board of six members. The cost will be but little more than under the present law, but what if it costs treble that amount—the reputation of New Jersey and the lives of its citizens are worth certainly \$100,000, if we do right in limiting expense to any amount. A prominent member of another profession, known and highly esteemed through the State and beyond, observed to us: "New Jersey is going behind in matters of public health. Massachusetts, New York, Pennsylvania and Michigan are far ahead of us. We as Jersey men ought to have State pride enough to take the lead as we did for many years, and from our position—between the two great cities, we have a conspicuous place and our actions are noted."

Away with the talk about economy that

will cripple her public health administration, and we would call the attention of our members to a most iniquitous suggestion that the bacteriological laboratory be abandoned to save \$6,000! That practically would mean the death of hundreds of our people annually.

The attention of the members of our Society is called to the bill just introduced, known as the "Lanning bill," which will be found in the June, 1908, issue of the Journal. Read it and intercede with the legislators for its passage. If they refuse such a law this year, we shall be prepared for a warm campaign with the people, until we succeed, as our Society did, in securing a State Board of Health originally.

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## NATIONAL BOARD OF HEALTH.

The paper by Dr. Dowling Benjamin in this issue of the Journal ably sets forth some of the reasons why a National Board of Health is necessary. We are pleased to hear that a carefully drafted bill is being prepared for introduction at the next session of Congress, and that the prospect of its passage is believed to be good. We appreciate the excellent work that has been done by the Marine Hospital and Public Health Service, but the belief has been growing and is stronger than ever in expression, that it is not adequate in its scope and power of operation to adequately meet the needs which a well organized National Health Board with thoroughly trained men in charge conducted on scientific principles and entirely free from all political influences would make possible.

We believe that some of the able men now in charge of the Marine Hospital service with others as leaders in the National Board would insure efficiency and success in its administration. Of course the bill will be drawn to avoid all clashing between National and State authorities. As tending to avert such collision and to secure uniformity of methods and harmony and thorough co-operation of all in sanitary administration, we believe that a

quarterly or semi-annual conference of the National Board with a representative from every State Board or Department of Health would be of advantage. We are not prepared to say it is essential that the board should have a representative in the President's Cabinet.

We have just received from Dr. S. G. Dixon, the Commissioner of Health of Pennsylvania, the first annual report of the Health Department of that State, which was organized about two years ago, under a bill of the same general character as that we are seeking to get for New Jersey. We congratulate Dr. Dixon and the State of Pennsylvania on the splendid work done and the promise of still better results made possible by the large appropriations the State has made for the work—about one million dollars.

## HEARING ON OSTEOPATHIC BILLS.

At the "hearing" given February 17th by the Assembly's Committee on Osteopathic Bills No. 81 and No. 101, there was a fair attendance of medical men from different sections of the State. According to custom, those favoring the bills had at this hearing the opening and closing arguments granted them, and they very adroitly reserved their leading arguments until the closing of the discussion, when our members could not reply. Their arguments generally were specious. It is evident that they are making desperate efforts this year. They had the representative of the osteopaths on the New York State Board of Examiners to help them this year and if his argument demonstrated any one thing it was that the osteopaths had no good sound reason to object to the proposition to give them one representative on the present board of examiners.

Able arguments were presented by some of the members of our State Society present against the passage of either bill. Among our speakers were Drs. E. J. Ill, J. M. Rector, N. L. Wilson, B. S. Pollak, B. D. Evans and C. A. Rosenwasser. Dr. Atkinson, the representative of the homeopathic physicians on our State Examining Board, also spoke against the bills. The

convincing nature of these arguments to any open, intelligent mind may be seen by the speeches of Drs. Ill and Wilson, which had been prepared in typewritten form and are printed below this editorial. We regret that we have not Dr. Evans' able argument. They ought to result in winning the fight for high standards of medical education and for proper requirements for licensure—for the protection of our citizens.

### Outline of Dr. E. J. Ill's Remarks.

"It seems to me lawgivers would get tired to have the same bills presented year after year and hear the same arguments pro and con. But life seems nothing else but a long siege of arguments. The argument in my case will be short and concise. It matters little to me what the bill contains so long as you understand we ask nothing for ourselves but what we ask for others. He who follows the golden rule will not go far from right.

"The legislators of this State would not think of forcing a sectarian religious view on any one. Just so little have you a right to force views in medicine on us. We as physicians care little how patients are treated. We leave that entirely to the honesty and conscientiousness of the individual. But what we do ask is that you give no one a preference to us in the requirements imposed on us by the law. That you place us all on the same level, that you demand an equal scientific foundation for the art. Before the birth of this great republic it was only necessary to spend two years in a doctor's office as an apprentice to secure the necessary right to practise medicine. Gradually the requirements were elevated until to-day we need take no back seat when we compare ourselves with foreign countries and foreign countries respect us for it. All this is to protect the people.

"Would you break down the barrier? Let the requirements to practise medicine be equal to all who undertake this difficult task. If you choose, let each doctor cure after his own fancy and every patient thus seek salvation by his own choice."

### Remarks by Norton L. Wilson, M. D., Elizabeth.

"I appear in opposition to the passage of House Bills Nos. 81 and 101. It is but fair to you to state that I am a regularly licensed physician and a member of the New Jersey State Medical Society. My presence here is due to the fact that I am also the county member of its legislative committee. This statement is made in anticipation of the argument that may be made, that the views expressed by me and the few arguments that I may make, may be attributed to selfish motives.

"The members of the committee will receive my assurance that my opposition to the passage of either of these bills is prompted not so much by professional interest, as by my regard for the public welfare. The enactment of either of these bills will in no way affect me, inasmuch as my practice is confined to a specialty alone, and is not general, and we specialists have not



applied to you for a separate board of examiners.

"I respectfully submit that there is no good reason or urgent demand for the passage of either of the proposed measures now under consideration by your committee. I say urgent demand. I should qualify this possibly, for I realize how insistent are the advocates of these measures. I had better have used the word wide-spread demand; for a careful investigation of the numbers now practising, show that osteopaths in New Jersey do not exceed 150, and of this number not all are agreed as to the form of the bill which should become a law. This is evidenced by the introduction of two bills relating to the same subject, but widely different in their provisions as to the required examination. In fact, a careful reading of No. 81 shows that only three years are required of them, while four are required of us. It does not include the subject of bacteriology. In fact, it looks to me like a measure to increase the revenue of the examining board.

"It will also permit the construction that some one is especially interested in it, in order that there may be established something like a correspondence school for the training of a profession, whose chief requisite in the minds of all should be thoroughness of learning.

"No. 101 is equally unnecessary, and if enacted into law will establish a precedent which will return to plague the inventor. As the law now is, notwithstanding the diverse views and teachings of the different members of the medical profession, all practitioners are required to pass an examination before the State Medical board, whether they be regulars, homeopaths or eclectics.

"Why the need of a new board to examine the followers of a special school of teaching? Once grant it to them, and the Christian Scientists may with equal claim ask for a special board for the examination and license of believers in that cult. The mental healer, the layer on of hands, the masseur and the adherents of any other peculiarism or fad will claim the same right of examination and license by a board composed solely of members entertaining views like their own.

"This bill, like No. 81, only provides for three years of study. I believe that the public interest requires a high standard of professional knowledge, and that you ought not by any act of yours to lower that standard or remove any of the safeguards of public health.

"The argument has been made to me by members of the Legislature, 'Why not license these men? They do some good.' No one disputes the fact that they are not capable of doing some good, but the Christian Scientist, the mental healer, the medicine man who beats the tom-tom and the old woman who stews up her herbs are all capable of doing good, but, gentlemen, is that any argument why these persons should be licensed?

"I feel that the recognition of osteopaths as such, and the granting of a license to them to practise their calling, without requiring from them more than a mere training in osteopathy, is fraught with danger.

"The theory of osteopathy is not founded upon scientific principles. Permit me to point out to you the fact that if you take into your bodies the germs of typhoid fever, through what

you eat or drink, no amount of manipulation can influence that disease, and yet the founder of this cult, Dr. Still, says: 'I do not believe that there are such diseases as typhoid, typhus, lung disease, rheumatism, sciatica, gout, colic, liver diseases, croup or any of the so-called diseases.' He further states that, separate or combined, they are only effects of cause and that in each case the cause can be found and does exist in the limited or excited action of the nerves, which control the fluids of the body.

"If what Dr. Still says is true, you gentlemen want to get busy and cut off all appropriations to the State Board of Health, to the State Sanatorium for Tuberculosis, the Village for Epileptics and the Home for Feeble-minded Children, and to curtail the unnecessary expenditure of money in trying to keep our rivers from becoming polluted and the efforts expended in trying to give our citizens pure food and unadulterated drink.

"Gentlemen, the medical profession has worked, without compensation, in season and out of season, to protect our people from disease, and are the citizens to whom you apply in the hours of distress. I, therefore, claim for them recognition from your honorable board. The 4,000 physicians of this State appeal to you, as the protectors of the people, and ask you not to put yourselves in the position of recommending osteopathy.

"Why should you not license the osteopath? Because osteopathy is capable of doing much harm, and I only have to quote to you from page 162 of 'Hazard's Practice of Osteopathy,' which is one of their leading books, where he says: 'For diphtheria, raise the clavicle and press the first rib downward and forward, working at its central articulation to correct the position of its head, or in the case of hemorrhage, complicating typhoid fever, inhibition of peristalsis, should be done by work from the ninth dorsal vertebra down along the lumbar region.'

"These manipulations cannot influence diphtheria, nor check hemorrhage, and in the judgment of all sane men art apt to increase them and thereby do harm.

"How many of you gentlemen would like to have your clavicle raised and your first rib pressed downward and forward, if you knew you had diphtheria? I suspect every one of you would scoff at such treatment, and yet you are asked to-day to license the practitioners of such an illogical cult, to practise upon the people of this State, that which you would not have practised upon your own bodies.

"We call upon you to settle this question for all time, not only as to the osteopaths, but all faddists who desire to practise upon the people of this State. The standard as set by the physicians is none too high; it should be higher, but if you insist upon breaking it down by admitting all sorts of isms and fads, you are taking a step backwards. Let all who desire to practise upon the people of this State pass the prescribed examination."

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After an operation for extensive carbuncle of the neck, a comforting support may be supplied by placing under the bandage a piece of heavy manila cardboard (book-binders' board), wetted and shaped to the back of the head and neck.—*American Journal of Surgery.*

**THE GERMAN HOSPITAL, NEWARK, INSULTING THE PROFESSION TO WHICH ITS SUCCESS IS LARGELY DUE.**

**Dr. E. J. Ill, on the German Hospital, Before Essex County Society, Feb. 16, 1909.**

The prominent part I have taken in this matter deserves an explanation before you, my confreres, true judges of professional honesty and integrity. You may consider me an idealist or over-sensitive, but please do not doubt my honest motives.

When I first learned that the staff of the German Hospital had been dissolved I said: "Some one has done a grievous wrong to the institution." However, when I learned that three men had been discharged because they had not provided a sufficient number of paying patients, I felt that an indignity had been offered to the profession as a whole, and being a consultant to the hospital, I felt the indignity so much the more. At this time I met Dr. Kipp, who declared the assertion to be true. It seemed important that I should verify the correctness of this testimony. I, therefore, visited five members of the Board of Directors of the hospital, who confirmed the statement. The president of the directors himself told me that one of the men dropped from the staff had during the past year produced but \$69 in pay patients. I suppose that could be verified from the records of the hospital, if such verification was necessary. I also learned that there might be some other causes, which, however, were not specified nor were they considered important factors in the matter; neither were the gentlemen given a hearing, a trial nor a warning. The impression seemed to prevail that the method adopted by the directors was a smooth one and would not cause a ripple in the professional world.

I felt the indignity so keenly that I told some of these gentlemen that they owed the discharged doctors an apology.

Is it right that the honest practitioners whose clientele is among the poor should be thus treated? Are the hospitals for the well-to-do and the wealthy? Are the directors of the hospitals to judge us by the financial aid we give them, or by the care and attention we give to those in the wards? Do we ever ask whether patients pay for their beds, or do we care to know whether they are the poorest of the poor?

These were the thoughts uppermost in my mind. I was assured and pleased to learn that no underhand work on the part of any member of the medical staff was at play, and that none knew anything about this whole matter until they had received the notice of the dissolution of the staff.

Dr. Kipp and myself asked for an invitation to meet the directors. Little was said by any member of the Board of Directors save the President and Mr. Goertz, a gentleman who has my highest respect. Mr. Goertz conceded that they had made a mistake and had been ill-advised.

A suggestion that the dropped men be reinstated and given a hearing was not agreed to and thus my resignation followed. My con-

nection with the institution, which had been a pleasant one for nearly thirty-seven years, was severed.

In the German Hospital I had done an apprentice's work, assisting a sick medical superintendent whenever my limited knowledge sufficed. During the past twenty years my assistance and counsel were always at the beck and call of the staff and it gave me pleasure thus to serve the hospital to which I owed so much.

You may be sure that a sleepless night preceded my resignation. If I have done an injustice to any one connected with the affairs of the hospital I am ready to apologize and make good. On the other hand if my position and that of Dr. Kipp's are such that you think we protected the profession from an indignity, give us your support.

For the action of the Essex County Society on the German Hospital question see Page 531. It states the adoption of the resolution was by an overwhelming majority. The vote was 79 to 5. See also the Somerset County report.—Editor.

**ACTION OF THE PRACTITIONERS' CLUB.**

To the Trustees of the German Hospital,  
Newark, N. J.

Gentlemen—At the regular meeting of the Practitioners' Club held on February 1st, 1909, the following resolutions were adopted, there being no dissenting vote:

The Practitioners' Club of Newark has been pained to learn that several members of the staff of the German Hospital, said to be a charitable institution, have been discharged by the Trustees for commercial reasons, in so far as these physicians have not produced a sufficient income to the hospital from their paying and private patients. It is, therefore,

Resolved, That this club consider the action of said Trustees derogatory to the good name of a profession notable for its charitable and unselfish work. It is furthermore

Resolved, That the Trustees of the German Hospital be, and are hereby, respectfully requested to reconsider this matter and reinstate these physicians so no stigma may be attached to innocent men. It is furthermore

Resolved, That this club most heartily endorse the action of the Trustees of any hospital who may ask for the resignation of any member of their medical staff for negligence in his duty or behavior unbecoming a gentleman. It is furthermore

Resolved, To send a copy of these resolutions to the secretary of the Trustees of the German Hospital.

Yours very respectfully,

C. B. Griffith, Secretary

The following members were present: Drs. H. C. Bleye, H. L. Coit, T. W. Corwin, E. P. Courtwright, W. S. Disbrow, A. C. Dougherty, C. B. Griffiths, W. Goodwin, E. Z. Hawkes, F. R. Haussling, E. J. Ill, J. D. Lippincott, E. W. Murray, W. A. Jaquith, G. B. Philhower, R. C. Potter, S. E. Robertson, R. H. Rogers, M. Seidman, M. F. Squier, T. Y. Sutphen, Edward Staehlin, C. E. Sutphen, Charles Teeter, W. S. Washington, Fred Webner, J. T. Wrightson.



### **Drs. Ill and Kipp Opposed to Dropping Physicians.**

(From the Evening News, Jan. 30, 1909.)

There seems to have been a misunderstanding between the directors of the German Hospital and Consulting Physicians Edward J. Ill and Charles J. Kipp, of the hospital medical staff, as to the status of the trouble over the reorganization of the visiting staff at the conclusion of the conference held Thursday night.

On the part of the governing board, it was announced yesterday that the consulting physicians were convinced that the action of the directors in eliminating three doctors from the staff was in conformity with the wisdom of the board as to what course should be pursued with the material welfare of the institution at stake. The directors seem to have been mistaken. They did not convince either Dr. Ill or Dr. Kipp that their action was right. The following letter to the Newark Evening News explains the position of the consulting physicians:

"To the Editor:

"Under the heading of 'Hospital Body Stands Firm' in last night's Newark Evening News, on page 3, it is stated, 'It is understood that upon hearing the reasons that actuated the directors in the reorganization of the staff the consulting physicians were convinced that from the viewpoint of the board the course adopted had been for the welfare of the institution.'

"How this understanding was arrived at we do not know, for we certainly did not express our approval of the board's action. On the contrary, we told the board that if the gentlemen who failed of reappointment, for alleged commercial reasons, were not appointed we should feel obliged to sever our connection with the institution, although we were greatly attached to it through many years' service. We have now resigned from the German Hospital.

"Charles J. Kipp, M. D.

"Edward J. Ill, M. D."

Several members of the hospital directors expressed the opinion to-day that the trouble in the institution will still be settled satisfactorily. Surprise was manifested at the action taken by Drs. Ill and Kipp subsequent to the conference of Thursday night. The directors did not anticipate that any resignations would be made, but it is known that their action was unanimous.

The present feeling of all the members of the governing board is that there shall be no recanting of the course adopted unless sufficient reason can be shown in behalf of the dismissed physicians that their elimination from the staff was not justified by the policy of the directors in seeking to promote the usefulness of the institution as a public charity. The directors still adhere to their contention that, as against the material welfare of the hospital, the question of professional ethics cannot prevail.

### **Alexian Brothers Hospital.**

The medical and clinical staff of the Alexian Brothers Hospital held its annual meeting and election of officers February 2, 1909, at the hospital. Fourteen physicians were present. Dr. Alfred Quinn, formerly of Halifax, Nova Scotia, was re-elected president. All the other officers were likewise given a second term. After the business of the meeting was finished the

staff was entertained by the hospital authorities with a banquet in the dining-room of the institution. Several speeches were made. The doctors had with them as a guest Rev. Bernard Kleppel, from Chicago, the provincial-general of the Alexian Brotherhood in the United States.

### **Hospital Turns Down Doctors.**

(From the Newark Evening News, January 28, 1909.)

The medical profession of this city is stirred up over a recent drastic action of the directors of the German Hospital. Three members of the medical visiting staff were dismissed in a manner that has aroused resentment and some of the most prominent members of the profession are up in arms against the action of the hospital management.

It has been intimated that unless action is taken that will change the situation, the Essex County Medical Society will be called upon to defend its code of ethics and go on record in condemnation of the procedure followed by the hospital management.

The physicians who fell under the ban of the directors were Doctors William F. Seidler, Marcus Seidman and Frederick Hexamer. Until the annual meeting of the directors of the institution, held early last week, they were members in apparent good standing of the medical staff. Dr. Hexamer was secretary of the medical organization of the hospital. They were not formally discharged from the service of the hospital, but were discarded when the directors, after taking formal action dissolving the medical board, established a new one.

The resentment of the medical fraternity, it is understood, is not because of the elimination of the three physicians from the hospital staff, but is based upon the reason given for that action. This reason, it is admitted, was not upon professional grounds, but upon commercial ones. The blacklisted doctors could not or would not aid in producing revenue to the hospital by bringing private patients to the institution for treatment.

Because of the stir caused among the members of the profession, a meeting has been called for to-night, at which the action of the last meeting will be discussed and the trouble considered in all its phases. Whether the directors will stand by their previous action or adopt modifying course is problematical.

The visiting staff of the hospital is composed of eight doctors, with two others occupying the positions of active consultants. Until the annual meeting of the governing board last week the staff was composed of Dr. Edward Staehlin, president; Dr. Hexamer, Dr. Richard G. P. Dieffenbach, Dr. Charles L. Ill, curator; Dr. Emil Guenther, Dr. Marcus Seidman, Dr. William J. Roerber, Dr. William F. Seidler, with Dr. Edward J. Ill and Dr. Charles J. Kipp as consulting physicians. This staff was entirely dissolved by decision of the directors, and when a new board was established, Drs. Seidler, Seidman and Hexamer were left off, and in their places Drs. James T. Wrightson, Frederick M. Paul and Francis R. Haussling were appointed.

So far as the formal action of the directors could determine, the only reason for the retirement of the three doctors was the monetary one

of being unable or unwilling to contribute as much as it was considered they should to the revenues of the hospital by bringing to it paying private patients. It is understood that under the surface were other reasons.

It is also understood that when it became known to certain members of the profession that this course was to be pursued, and the intimation was given that other reasons were involved in the determination to change the personnel of the medical staff, they requested that the directors proceed in a different manner. It was asked that if there had been any dereliction of duty or any other ground for criticizing the services rendered by the physicians who came under the ban of official disapproval, that formal charges be preferred and a trial ordered.

The reason for not adopting this course was that the directors felt it was not incumbent upon them to stir up trouble or to sacrifice their personal interests by going into an exhaustive investigation or trial of the marked physicians. The directors were not willing to pit the question of professional ethics against the material welfare of the hospital. So they decided to adopt a course that seemed to them to be the wisest and most effective one under the circumstances.

The directorate of the hospital is composed of the following: Elias Berla, president; Paul W. Roder, vice-president; Gottfried Krueger, August A. Sippel, Ernest Hirschhoff, secretary; August Goertz, William F. Hoffmann, Christian W. Feigenspan, Herman Kreidler, Emil Schumacher and Gustavus Staehlin.

Prior to the annual meeting the board had decided, apparently, upon its course of partial elimination of the medical staff. It called upon Dr. Staehlin to submit a list of twelve physicians for membership of the proposed reorganized staff. It is said that Dr. Staehlin demurred, notwithstanding some of those interested in the affairs of the medical board were inclined to ascribe the prevailing discontent to influences of which he may not have been wholly ignorant.

When the request made to Dr. Staehlin failed to bring the proposed new list of eligibles to the medical staff, it is said, the directors adopted a more drastic course. They instructed President Berla to make a demand for the list. This was more productive, and when, after the old board had been formally dissolved, a list of twelve was submitted, it included the names of the eight members of the old board with four others. Among these four were those who were selected.

In retort to the adverse criticism of the medical men of the city, the hospital directors have declared that they alone were responsible for the changes. They take the view that while the medical board is charged only with the care and treatment of the patients of the institution, the governing board must look both for the welfare of the hospital as such and for its proper maintenance.

They have pointed to the fact that the problem of meeting the bills and claims against the institution is always before them to solve. They are required to see that the resources of the institution are sufficient to meet the demands upon it commercially. They claim they have, therefore, taken such action in this case as in all other practical questions that have come before them, with only the best interests of the hospital in view.

### THE MORRISTOWN MEDICAL CLUB.

Morristown Medical Club and its guests were entertained by Dr. James Douglas, at his home on Maple avenue, January 27th. The host, as is customary at these meetings, read a paper on a case that had been treated by him, other members of the club discussing and elucidating many points of the subject. Dr. Douglas's topic was "An Interesting Case with Many Complications."

Among the guests were Dr. Christopher C. Beling, of Newark; Dr. Thomas W. Harvey, of Orange; Dr. Calvin Anderson, of Madison; Dr. Frederick W. Flagg, of Rockaway; Dr. Peter S. Mallon, Dr. F. C. Horsford and Dr. Blaze Cole, of the State Hospital at Morris Plains; and among those from Morristown were Dr. C. C. Mial, Dr. Henry A. Henriques, Dr. Alfred A. Lewis, Dr. Stephen Pierson, Dr. James B. Griswold, Dr. Clifford Mills, Dr. Gustave A. Becker, Dr. George W. Wilkinson, Dr. Harry Vaughan and Dr. Fred Wooster Owen.

### THE OPTOMETRY BILL.

#### Some Reasons Why Assembly Bill No. 151, Known as the Optometry Bill, Should Not Pass.

To understand the anatomy or physiology of the eye it is necessary to have a knowledge of the whole body.

The eye is nourished like other parts of the body and is subject to the same pathological changes. It is subject to local diseases, but many of its affections are only local expressions of a disease affecting the whole system.

A mere knowledge of optics and errors of the dioptric system of the eye, does not enable one to treat disease of the eye or even to correct errors of refraction and anomalies of the accommodation.

Only physicians trained in the special work are competent to select glasses for the correction of these errors. The optician contends the business of fitting glasses is purely mechanical, requiring neither the general knowledge of the physician nor the special knowledge of the oculist.

There are several very severe conditions of the eye, which in their early stages accompanied by only slight impairment of vision, and in such cases much harm may be done by giving glasses.

Absolute rest of eyes, and not wearing glasses to use the eyes, and often competent surgical operations are required in such cases to prevent blindness. If such cases fall into the hands of an optician, irreparable damage is done, not only by the prescribing of glasses, but also by keeping the unlucky individual from consulting a competent surgeon, who alone can save the eyes.

Such cases are frequently met with by all physicians.

Much harm is also done by prescribing the wrong glasses for healthy eyes. The oculists of this State frequently see glasses fitted to individuals, by opticians, who do not need them. We are, therefore, forced to conclude that either the optician is ignorant or he has prescribed glasses simply to make a sale.



The optician is a mechanic who grinds lenses and deals in optical glasses and instruments.

He should, like the apothecary, fill prescriptions given by the physician, but not do the prescribing.

Why should not the druggists introduce a bill asking to have the privilege of prescribing drugs?

Some of these men call themselves doctors of physiological optics. Physiological optics is one of the many studies that medical men have to master and a knowledge of this branch alone would not qualify a man to prescribe glasses.

There are all sorts of so-called colleges where the fitting of eyeglasses is said to be taught in a period varying from a week to several months.

The oculist spends at least eight years in qualifying himself for the practise of his profession, and has to keep on studying the rest of his life if he wants to keep abreast with progress.

If any person sees fit to go into a store and buy a pair of glasses he does it on his own responsibility, and we have no desire to prevent him from doing this, but we object to the State sanctioning the prescribing of glasses by others than physicians for the reasons already stated.

We are not opposing this bill because it will work harm to the oculist, for it will not do so, but rather to protect the public.

We who treat hundreds of cases every year in our free dispensaries see the evils of glasses prescribed by opticians, and a certificate given by the State recognizing the optician as a man competent to fit glasses, would undoubtedly induce many unthinking people to place confidence in their ability to do this work.

We feel that the State owes something to its citizens and should throw about them every safeguard to protect them from disease of all parts of the body.

The act regulating the practice of medicine, clearly makes these men culpable and they now appeal to the State for protection, by asking recognition, in order that they may escape punishment.

Not all the opticians of the State are in favor of this bill, but some who see in it an opportunity to sit upon an examining board and thereby gain a little free advertising and a few of their brother opticians' dollars, are the ones who are pushing it.

They tell you this bill is to keep the peddling optician from humbugging the people, but I suspect you can see the purport of it just as we do. We do not want more examining boards, but do want protection for the people.

L. M. HALSEY, M. D.,

Chairman of Committee on Legislation.

## BOOK REVIEWS.

Orthopedic Surgery for Practitioners, by Henry Ling Taylor, M. D., Professor Orthopedic Surgery, Post-Grad. Hosp.; Asst. Surg. Hosp. Rupt. and Crippled, N. Y. 250 illustrations. D. Appleton & Co., New York and London, 1909.

The object of this book is to give the essential facts as to the various deforming diseases and their results, together with an outline of treatment. It is especially adapted to the needs of the general physician to whom these cases

generally first appeal for aid. Dr. Taylor's personal experience and his close association with the late Dr. C. Fayette Taylor have given him unusual advantages for observation. He has stated his views clearly and has carried the subjects of pathology and treatment well up to date. The work is beautifully illustrated and printed in large, clear type. Its careful study will enable the general practitioner to more quickly detect and successfully treat the crippling diseases in their early stages.

Seven Hundred Surgical Suggestions, by Walter M. Brickner, B. S., M. D., Asst. Surg. Mt. Sinai Hosp.; Eli Moschcowitz, Asst. Phys., Mt. Sinai Hosp. Disp., and Harold M. Hays, M. D. Third Series, duodecimo; 153 pages. N. Y. Surgery Pub. Co., price \$1.

This little book is filled with practical brevities in surgical diagnosis and treatment, useful for every general practitioner or surgeon. Scarcely any one could glance over its pages without receiving useful hints applicable to cases under his treatment.

## Obituary.

FRITTS—At Plainfield, N. J., February 8, 1909, Dr. John T. Fritts, aged 63. He was graduated from Bellevue Medical College in 1866 and had practised in Plainfield since 1878, until the last three or four years. He was a member of the Union County Medical Society and of the American Medical Association.

### Action by the Union County Medical Society.

Whereas, The Union County Medical Society has, with sincere regret, learned of the death of Dr. John T. Fritts, a member of this society, and who was a practising physician of Plainfield, N. J., since 1878:

Resolved, That while we bow submissively to the wisdom which is beyond our understanding, we deplore the death of our fellow member, and we desire to extend to the family of our deceased brother our sympathy in their bereavement.

Resolved, That we attend the funeral services in a body;

Resolved, That these resolutions be spread upon our minutes, that they be published in the Plainfield daily papers and a copy of the same be sent to the family of the deceased.

T. H. Tomlinson,  
Norton L. Wilson,  
P. B. Cregar,  
Committee.

### Action by the Plainfield Medical Association.

Inasmuch as it has been the custom from far remote times, and fittingly so, to memorialize the virtues of departed worth, and realizing that in no sphere of life, however exalted, may greater exemplification of all those nobler traits and attributes of true manhood be found than in the active practice of the healing art; now, therefore, we, The Plainfield Medical Association, bowing in submission to the Allwise Providence that has taken from us our beloved friend and brother, Dr. John T. Fritts, do

Resolve, That we express to his family our deeply-felt sympathy in this hour of sorrow,

both to them and us. That we acknowledge his long life of usefulness in his chosen profession; his many years spent in the ceaseless battle against disease and death; and his active interest and help in promoting the best interests of the community of which for so many years he was an active and honored member. That we recall in loving memory his kindliness, his courtesy and gentleness, and his ever-ready willingness to render all assistance in his power whenever it might be invoked. That we commend his family to the Source of all True Comfort for strength in this hour of trial. And that in token of our sympathy and respect these Resolutions be entered on the minutes of the association, that a copy be sent to the family, and that they be published in the Plainfield papers.

(Signed)

J. H. Buchanan,  
P. J. Zeglio,  
M. H. Anthony,  
Committee on Resolutions.

**WILLIAMSON**—In Asbury Park, N. J., February 2, 1909, Dr. Alexander Williamson, aged 61. He graduated from the University of Pennsylvania, Philadelphia, 1878.

## Personal Notes.

**Dr. James S. Brown**, of Montclair, presents an able paper in the Medical Record, January 23d, on Pyloric Stenosis.

**Dr. J. Hervey Buchanan**, of North Plainfield, has been appointed a member of the medical board of Muhlenburg Hospital, Plainfield.

**Dr. Charles V. Buttler**, of New Brunswick, has returned from a pleasant Western trip.

**Dr. J. Ackerman Coles**, of Scotch Plains, has presented to the Plainfield Public Library a set of books entitled "The Makers of History." He has also notified the New Brunswick authorities of his intention to present the city with a statue of Benjamin Franklin and pedestal now being made in Pars.

**Dr. Daniel A. Currie**, of Englewood, we regret to report, is seriously ill with gastric disease.

**Dr. Frank D. Gray**, of Jersey City, has, we regret to say, resigned from our Committee on Legislation.

**Dr. B. Van D. Hedges**, of Plainfield, has been elected president of the Board of Health of that city.

**Dr. William E. Ramsey**, of Perth Amboy, recently suffered a fracture of his ankle, resulting from an auto accident. He has our sympathy. His wife met with a serious auto accident only a few weeks before.

**Dr. Laurence P. Runyon**, of New Brunswick, has been appointed a member of the staff of Wells Memorial Hospital of that city.

**Dr. James P. Schureman**, of New Brunswick, has also been appointed a member of the staff of the Wells Memorial Hospital.

**Dr. Arthur Stern**, of Elizabeth, has an article in the January 30th issue of the A. M. A.

Journal on Diagnosis and Treatment of Catarrhal Pneumonia Complicating Infectious Diseases of Childhood.

## STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

### Monthly Statement of Mortality, January, 1909.

There were 3,164 deaths reported to the Bureau of Vital Statistics for the month ending January 15, 1909, a decrease of 117 from the corresponding period last year. By ages there were 602 deaths among infants under one year, 267 deaths of children over one year and under five years, and 982 deaths of persons aged sixty years and over. Pneumonia and cancer show a decided increase, while the number of suicides (44) is larger than for any period during the past six months. The climatic conditions at this season of the year are ideal for the development of pneumonia, therefore persons in ill health or those predisposed to respiratory trouble should exercise the greatest possible care. Those who have had pneumonia are especially predisposed to it again and the best possible precaution is for all to observe the natural laws for the preservation of health.

The following shows the number of certificates of death received during the month ending January 15, 1909, compared with the average for the previous twelve months, the latter being given in brackets:

Typhoid fever, 21 (33); measles, 33 (14); scarlet fever, 23 (34); whooping cough, 21 (19); diphtheria, 65 (46); malarial fever, 1 (3); tuberculosis of lungs, 330 (296); tuberculosis of other organs, 49 (51); cancer, 143 (131); cerebro spinal meningitis, 15 (26); diseases of nervous system, 380 (352); diseases of circulatory system, 395 (320); diseases of respiratory system (pneumonia and tuberculosis excepted), 225 (179); pneumonia, 355 (247); infantile diarrhoea, 84 (218); diseases of digestive system (infantile diarrhoea excepted), 183 (195); Bright's disease, 205 (198); suicide, 44 (37); all other diseases or causes of death, 592 (603); total, 3,164 (3,002).

### Laboratory of Hygiene, Division of Food and Drugs.

During the month ending January 31, 1909, 740 samples of food and drugs were examined in the State Laboratory of Hygiene as follows: Those below standard: 27 of the 313 samples of milk (9 suits begun); 11 of the 19 of butter (7 suits); 7 of the 12 of lemon extract; 2 of the 20 of honey; 6 of the 11 of lime water; 11 of the 23 of tincture of iodine; 7 of the 70 various other samples. All the chocolate, cocoa, coffee, molasses, sausage, starch, cream tartar and witch hazel were above standard, and all the 167 samples but one of spices.

### Laboratory of Hygiene, Bacteriological Department—Specimens for Bacteriological Diagnosis.

From suspected cases of diphtheria, 6,318; tuberculosis, 371; typhoid fever, 135; malaria, 95; miscellaneous, 10; total, 6,843.



### Division of Creameries and Dairies—Monthly Report, January, 1909.

**Creameries**—Total number of creameries inspected 9, located at Allentown, Monmouth County; Baptistown, Hunterdon County; Camden, Camden County; Frenchtown, Hunterdon County; Hoboken, Hudson County; Hopewell, Mercer County; Milford, Hunterdon County; Monroe, Sussex County; Skillman, Somerset County.

**Dairies**—Total number of dairies inspected, 109. Location, number inspected and disposal of product as follows:

Burlington County—Bordentown, 2, Bordentown; Bordentown Township, 7, Bordentown; Chesterfield Township, 8, Bordentown.

Essex County—Belleville Township, 1, Newark and Belleville; Livingston Township, 12, Orange; Millburn Township, 2, Summit and Short Hills; South Orange Township, 1, South Orange, Maplewood, Wyoming; West Orange, 2, Orange.

Mercer County—Hopewell Township, 1, Princeton; Princeton Borough, 2, Princeton; Princeton Township, 7, Princeton; West Windsor Township, 2, Princeton.

Middlesex County—South Brunswick Township, 4, Princeton.

Morris County—Chatham, 1, Millburn, Springfield, Short Hills and Chatham; Chatham Township, 1, Madison, Morristown, Chatham, Summit and Short Hills; Chester Township, 9, Orange.

Somerset County—Franklin Township, 1, Princeton; Montgomery Township, 7, Princeton.

Sussex County—Hardyston Township, 8, Monroe Creamery; Lafayette Township, 11, Lafayette Creamery; Sparta Township, 5, Monroe Creamery.

Union County—Linden Township, 2, Roselle; Springfield Township, 5, Springfield, Millburn, Short Hills and Wyoming; Union Township, 7, Roselle, Roselle Park and Wyoming.

Number of samples of water taken from dairy premises, 56; from creamery premises, 1.

### Division of Sewerage and Water Supplies.

Total number of samples analyzed in the laboratory, 157, as follows: public water supplies, 46; private supplies, 20; dairy wells, 54; creamery supplies, 1; sewage samples, 26.

### Inspections.

Public water supplies inspected at Hackettstown, Clinton, Camden, Medford, Taunton, Essex Fells, Bridgeton. Private supplies inspected at South Bound Brook, Dover.

Sewage disposal plants and systems inspected at Westfield, Lakehurst, Asyla, Glen Gardner, Plainfield, Burlington, Red Bank, Galilee, Ridgewood, Essex Fells, Newton, Trenton Asylum, Vineland, Moorestown.

Cases of special pollution investigated at Hackettstown, Phillipsburg (2), Clinton, Pattenburg, Three Bridges, Dover, Bridgeton, Swedesboro.

Stream inspection continuing on tributaries of Delaware, Raritan and Shrewsbury Rivers. Number of persons summoned before the board, 55. Cases referred to attorney-general, 4.

During the month ending January 31, 1909, 84 inspections were made in 43 cities and towns.

The following articles were inspected during the month, but no samples were taken: Milk, 385; butter, 477; foods, 758; drugs, 258. Other inspections were made as follows: Milk wagons, 264; milk depots, 36; grocery stores, 335; drug stores, 39.

## ANNUAL MEETING OF THE MEDICAL SOCIETY OF NEW JERSEY,

AT HOTEL CAPE MAY, CAPE MAY, JUNE 22, 23 and 24, 1909.

**It will be a very important meeting. Let every member who can do so, arrange his summer vacation plans so as to include attendance upon this meeting.**

During the week of final preparation of matter for this issue of the JOURNAL the editor was confined to his bed with a rather severe attack of influenza, which has made close mental application difficult and prevented that careful thought, and thoroughness in proof reading he has been accustomed to give. We state these facts as our excuse for any errors or omissions that may be noticed.

The JOURNAL will be glad to print original papers from any source, preferably from members of the State Society, provided that they shall be of sufficient merit and shall be contributed to this paper exclusively.

Anonymous communications will not be published, but the name of the author of a communication will be kept secret if the editor is requested to do so.

The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer. We cannot promise to return unused manuscript.

Authors may obtain reprints of their papers at cost, provided a request for them be written on the manuscript.

Matter received after the 20th of any month cannot appear in the next issue of the JOURNAL.

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## THE RESUSCITATION OF PERSONS SHOCKED BY ELECTRICITY.\*

By **Edw. Anthony Spitzka, M. D.,**

Professor of General Anatomy, Jefferson Medical College, Philadelphia.

Not the least of the dangers of present-day life, concomitant with the growth of civilization and of commercial progress, resides in the many contrivances devised for the employment of electricity in the industries and in general traffic. To the list of accidents and death by lightning must now be added—more and more each year—records of death and injury by industrial currents. So impressively potent is this death-dealing agency that it is now employed successfully in five States of the Union as the most rapid and, incidentally, the most humane method of executing criminals. It has been this mode of application of electricity which interested me to no small degree and which has led me to consider the problems of accidental death and injury in the light of experience with such deliberately consummated deaths and the post-mortem findings therein revealed. Furthermore, experiments have been, and still are, conducted in many centres of research, directed toward the formulation of some method or methods that may be more or less successfully employed in the attempted resuscitation of persons and animals accidentally injured by electric shock and either only apparently dead or actually beyond all human aid.

Let me first present my observations in

cases of legal execution, emphasizing the post-mortem findings as a means toward understanding the mode of death and then consider the conditions controlling most accidental deaths and injuries with the view of establishing some guiding rule to follow in attempted resuscitation.

Electrocution—more properly “electrothanasia”—compounded from “electro-execution,” is the popular name for the infliction of the death penalty by passing through the body of the condemned a current of electricity of sufficient strength to cause death. The method was first adopted by New York State in 1888 by a law which became effective on January 1, 1889, and which provides how many persons may witness an execution; that a post-mortem examination of the body of the convict be performed, and that the body, unless claimed by relatives, be interred in the prison cemetery with a sufficient quantity of quicklime to consume it.

The first criminal to be executed by electricity was William Kemmler, on August 6, 1890, in Auburn Prison. Since that time over one hundred murderers have been executed in New York State and the method has been adopted by Ohio (1896), Massachusetts (1898), New Jersey (1907) and Virginia (1908).

Reports on the earlier cases have been published by Drs. Carlos F. MacDonald, E. C. Spitzka, Ira Van Gieson, E. W. Holmes and, with reference to nerve cell changes, by P. A. Fish.

My own observations are based upon thirty-six electrocutions, during the last seven years, at Sing Sing Prison, Auburn Prison, Dannemora Prison and Trenton (State Penitentiary). Of these twenty-seven came to autopsy at my hands.

The apparatus consists of a stationary

\*Read before the Tri-County Medical Society of South Jersey, Woodbury, Jan. 26, 1909.



engine, an alternating dynamo capable of generating 2,000 volts, a "death-chair" with adjustable head-rest, binding straps and adjustable electrodes. (At Trenton a 2,400 volt current is taken from the Public Service wire and lowered to the desired tension by a rheostat.)

The voltmeter, ammeter and switch-board controlling the current are located in the execution-room; the dynamo-room is communicated with by electric signals. Before each execution the apparatus is thoroughly tested. When everything is in readiness the criminal is brought in unfettered and usually unassisted, and seats himself in the chair. His head, chest, arms and legs are secured by broad straps, an electrode thoroughly moistened with saturated salt solution is affixed to the head, another to the calf of the leg, both electrodes being molded so as to assure good contact. The head is not necessarily shaved as is popularly thought.

The application of the current is usually as follows: The contact is made with a high potential—1,800 volts—for five to seven seconds, reduced to 200 to 250 volts until a half minute has elapsed; raised to high voltage for three to five seconds; again reduced to low voltage until one minute has elapsed, when it is again raised to the high voltage for a few seconds and the contact is broken. The ammeter usually shows that from seven to ten amperes have passed through the criminal's body.

A second or even a third brief contact is sometimes made, partly as a precautionary measure, but more to completely abolish reflexes in the dead body.

The time consumed by the strapping-in process is usually about forty-five seconds and the first contact is made a few seconds later. In all about sixty to seventy seconds elapse from the moment the convict leaves his cell until he is shocked to death.

The convicts that I have seen thus dealt with have usually slept soundly the night before; they have entered the room calmly and stolidly, often with a half smile on their lips, some without uttering a word, others repeating a brief prayer, still others with a cheerful good-bye to those present. They usually seat themselves without betraying any signs of fear or trembling, curiously watching the strapping-in process for a while, then sitting erect, looking straight ahead at nothing in particular.

The physician in charge observes the

respiratory movements of the prisoner and signals to the electrician at a moment when the lungs contain the minimum quantity of air. At the moment when the contact is made the criminal's body stiffens in a state of tonic muscular spasm, restrained by the straps. This spasm abates somewhat as the voltage is reduced, to again attain its maximum with each raise of voltage. When the current is interrupted the body collapses completely. An examination by the physicians usually fails to elicit any signs of life. Occasionally there is heard a turbulent, inco-ordinate, accelerated heart-beat, but apparently limited to the auricular chambers of the heart. In only two cases was there any respiratory effort and this was limited to a single contraction of the thoracic respiratory muscles. An additional brief contact or two regularly abolished these reflex phenomena.

The reason for making the contact at the moment that the convict has expired air from the lungs in the natural course of his breathing is this—and it will explain why certain witnesses of the first electrocution thought that life still existed in Kemmler's body: It must be recalled that there is created a terrifically powerful spasmodic contraction of all muscles, including the sphincters and the glottis. The closure of the glottis confines whatever air may be in the lungs; upon interrupting the current the body becomes entirely limp, the glottis partly relaxes, the thorax collapses and the contained air rushes through the partly closed glottis. A sound resembling a sigh or half groan may be thus produced upon the body of any dead animal; a little mucus present augments the sound into a gurgle. It is no wonder that inexperienced persons believe life to be still present.

The death is undoubtedly painless and practically instantaneous. The vital mechanisms of life, circulation and respiration, cease with the first contact. Consciousness is blotted out instantly and the prolonged application of the current as it is usually practised by Mr. E. F. Davis, the State electrician of New York, ensures the permanent derangement of the vital functions so that there could be no recovery of these. Occasionally, the drying of the sponges through undue generation of heat causes desquamation or superficial blistering of the skin at the site of the electrodes, but not often. Post-mortem discoloration, or lividity, often appears during the first

contact. The pupils of the eyes dilate instantly and remain dilated in death.

The post-mortem examination of "electrocuted" criminals reveals a number of interesting phenomena.

The temperature of the body rises promptly and reaches as high as 120 degrees Fahrenheit to 129 1-2 degrees Fahrenheit, within twenty minutes in many cases. After the removal of the brain the temperature recorded in the vertebral canal was often over 120 degrees Fahrenheit. The development of this high temperature is to be regarded as resulting from the active metabolism of tissues not (somatically) dead within a body where all vital mechanisms have been abolished, there being no circulation to carry off the generated heat. The maximum heat is generated at the site of the leg-electrodes, where muscle — myosin — coagulation is most extensive. Furthermore the release of from ten to twenty horsepower of energy within the body must contribute materially to the caloric increase.

The heart, at first flaccid when exposed after death, soon contracts and assumes a tetanized condition. This is particularly marked in the left ventricle. On the whole the organ assumes the form of a heart in systole. In one case (Koenig) the right ventricular wall of the heart had ruptured in several places. In one case I was able to elicit fibrillar contractions, limited to the small area stimulated by touching the wall of the heart with a cold instrument. In several cases mechanical irritation of the atrio-ventricular bundle elicited slight contractions limited to the columnae carnae and the papillary muscles of the left ventricle. In experiments conducted with Professor Coplin upon one of the bodies, this mode of contraction could be called forth by faradaic stimulation, although no response was elicited by direct stimulation of the heart muscle. In the same individual it was impossible to elicit any response via the nerve system, either through stimulation of the cerebral cortex (exposed within about ten minutes), the spinal cord or peripheral nerves, although muscular reflexes could always be called forth by directly stimulating the muscle. Involuntary muscle strictures remained unresponsive, however.

The lungs are usually devoid of blood and weigh only seven or eight ounces avoirdupois each.

The blood is profoundly altered bio-

chemically. It is of a very dark, brownish hue, and it rarely coagulates. Either the fibrinogen, or the fibrin-ferment, or both, are destroyed.

The maximum damage is undoubtedly wrought in the nerve system, though this is not always manifest. Regarding the histologic changes, reports from various sources differ. There is a general agreement as to the frequent occurrence of capillary hemorrhages, disruptive and destructive for adjacent tissues. In the nerve-cells themselves there appears to be no apparent change, although there must have resulted terrific molecular change. P. A. Fish found vacuoles in one case, but no visible changes in another. Aside from the capillary hemorrhages and the arterial anemia with venous congestion, the brain shows no gross changes of appearance. In a case of accidental death from contact with an alternating current of 1,000 volts for about one-half minute, Jel-linek found extensive streaks of capillary hemorrhages in the gray substance of brain and spinal cord together with more or less destruction of the nerve cells, extension of the cell nucleus, etc.

In several cases\* which came to autopsy at my hands, I have had sections made of the pons, oblongata and spinal cord by my colleague, Dr. Radasch, and these have revealed curious circular areas with a peripheral zone of condensation which fades off into the surrounding unaffected areas. The bulk of the central rarefied portion shows a delicate network of loose fibrillae which in all probability are glia fibers. The cellular elements in the rarefied area are few in number though apparently free nuclei are scattered in this portion. These areas follow more or less closely the course of the finer vessels. Many of them contain an unruptured vessel centrally located, while others contain longitudinal sections with the areas arranged in a bead-like manner along such vessel. These areas are larger and more numerous in the pons than in the oblongata and spinal cord and apparently distributed in the longitudinal directions more frequently than in other directions. They seem to resemble gaseous emphysema and are possibly due to electrolytic liberation of gas in the peri-vascular spaces. One is reminded of the punctures in a piece of

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\*The study of these findings will be reported in more extensive form by us in another publication.



paper interposed in the path of the sparks of a static machine.

Literature is replete with reports of experiments on animals with the view of ascertaining (a) what the mode of death by electricity is, and (b) what circumstances favor resuscitation. To these researches may be added the numerous reports, chiefly by Jellinek, Schumacher, Prevost and Battelli, Pfahl, Aspinall, Mills and Weisenburg, Eschle, Trotter, Kalt, Eulenburg, Bernhardt and others, dealing with accidental cases of electric shock with fatal or non-fatal outcome.

One cannot safely predict exactly what will happen in any case of accidental shock by electricity. Many circumstances and conditions affect different cases and many factors must be considered in each case. The most important factors to be considered are:

Nature of the current, whether direct or alternating (and the frequency of alternations).

Tension of the current—expressed in volts.

Intensity of the current—expressed in amperes.

Resistance of the individual—expressed in ohms.

Duration of contact.

Points of contact and area of contact surfaces.

Whether shocked in a "grounded" circuit or by direct bi-polar contact.

Individual susceptibility.

Broadly stated, the death of an individual is the more certain—the greater the voltage, the greater the amperage, the longer the period of contact, the better the contact with two poles rather than with but one metallic pole and the ground, and the lower the individual's resistance. This broad statement must be modified, however, with regard to each separate factor or condition, as well as the combination of several such factors.

An electric shock may ensue either (a) from contact with two poles of a circuit; (b) while standing on the ground and coming in contact with one pole of a "grounded" circuit; or (c) without any contact whatever, as with currents of high tension where mere proximity of the body will permit the electricity to overcome the resistance of the intervening air space. Shocks by atmospheric electricity belong to this category as a rule, and many of the industrial currents may jump an air space of one or two inches or even more. Also

one may receive a "shunted" current by grasping the conductor with two hands while insulated from the "ground." Owing to the great resistance of the body and the great conductivity of the wire, the shunted current is negligibly small, but even under these conditions a fatal shock may ensue.

#### TENSION.

The currents in common use in this country are:

1. Incandescent light systems, 110-220 volts.

2. In mills, factories, printing shops, etc., up to 500 volts.

3. Trolley roads, including third rail systems, 500 to 800 volts, usually "direct" current.

For the transmission of electricity to great distances, a current of 20,000, 50,000, even 80,000 volts is generated to be stepped down by transformers at the distributing stations.

The currents used in telephone and telegraph systems are much weaker, as a rule, but the wires may at any time become crossed with more heavily charged circuits and thus become a source of danger to operators and others using such instruments.

#### INTENSITY.

The intensity of the currents mentioned above is very variable and depends largely upon the load. Thus the incandescent light circuits may carry only a fraction of an ampere, while currents used for traffic and machinery may range from 200 to 3,000 amperes.

#### DISTRIBUTION OF THE CURRENT IN THE BODY

It has been contended that the current cannot reach organs protected by bony coverings, as in the case of the brain and spinal cord. Bone, it is true, is a poor conductor, but there are numerous foramina for the entrance and exit of blood and lymph channels and these have been proven to be excellent conductors of electricity. The maximum density of the current is, of course, at the site of contact in and beneath the skin. The further apart the points of contact are the deeper does the current penetrate. The density of the current is, however, always greatest at the surface. This fact is, perhaps, most favorable for possible resuscitation in accident cases, inasmuch as the deeper vital parts may receive so small a quantity of electricity as to be but little damaged. Thus some individuals have escaped death

through contact with high tension currents because the path of the current was limited to an arm or a leg. On the other hand, I might mention here the case cited by Jellinek of a lineman who died purely of fright on touching a high-tension wire which was not charged at all.

#### RESISTANCE.

Different tissues bear different degrees of resistance to the current and different individuals possess varied degrees of resistance as a whole.

Thus the dry skin of the sole of the foot may offer 100,000 ohms resistance; the dry, horny hand of a laborer as much as 1,000,000 ohms; the skin of the face or back of the hand may offer only 10,000 to 20,000 ohms; while the mucous membranes sink in resistance value to only a few hundred ohms.

That individuals differ among themselves has been evident in electrocutions and in accident cases. Some will succumb to 110, or even, as in one case, to 65 volts, while others suffer extensive but non-fatal injury from many thousand volt currents.

If the mode of contact be such as to include a "ground" circuit, the nature of the "ground" influences the amount of current that traverses the individual. A wet floor, as in cellars, bath-rooms, vat-rooms, wash kitchens, etc., or a steel-frame building, is more dangerous than a dry floor or the floor of a building with little metal in its construction.

#### AREA OF CONTACT SURFACES.

Much depends upon the area of the contact surfaces. Thus contact of the ball of the finger may offer 50,000 ohms resistance, while the entire surface of the hand offers only 500 ohms. Hence, with high tension currents with small contact surfaces there is apt to be considerable transformation of electrical energy into heat, into "arc"-formation, causing bad burns or melting of the metal. If the contact be a good one, the resistance of the body diminishes, unless the burns of the surface become extensive, thus increasing the resistance.

#### DURATION OF CONTACT.

Duration of contact is of great importance. To accomplish the fibrillary-contraction paralysis of the heart in animals, one-half to one second usually suffices, while contact for very small fractions of a second may not be followed by any disturbance of the vital mechanisms or of

the nerve system. Thus an individual may be touched by a swinging wire for only a fraction of a second, or he may be thrown instantly from the point of contact by his own convulsion. In such cases consciousness may be abolished for a shorter or longer period and be followed by full recovery. In contacts of longer duration, perhaps because of convulsive grasp of the wire, severe injury and death are more certain through heart paralysis or asphyxia, or both combined.

Jellinek considers the direct current more dangerous, volt for volt, than the alternating. Prevost and Batelli, however, have shown that to bring about death, i. e., to throw the heart into fibrillary contractions, four or five times as much tension of direct current must be employed as of alternating current, but the direct current accomplishes this result in a shorter period. Paralysis of the nerve system is more pronounced with direct current, but convulsive symptoms ensue more readily after contact with alternating current.

#### THE NUMBER OF ALTERNATIONS PER SECOND, IMPORTANT.

Low tension currents with 30-150 alternations are more dangerous to the heart than if of more than 500 frequency. Greater frequencies, as in Tesla currents, are practically harmless.

The symptomatology of electric shock is not easily formulated. The immediate as well as the later effects vary widely in different cases. Among the immediate effects may be mentioned:

##### I. Local Signs—

- (a) Burns of the skin and hair.
- (b) Puncture and rupture of tissues.
- (c) Superficial necroses.
- (d) Metallic impregnation of the surface tissues.
- (e) Hemorrhages.
- (f) Edema, erythemas, "lightning" figures.

##### II.—General Effects—

- (a) Loss of consciousness and of nerve-functions generally.
- (b) Paralysis or spasms of muscles.
- (c) Disturbances of respiration and cardiac action; high temperature.

Later—Affections of the bowel activity—meteorism; constipation; albuminuria; icterus; incontinence or retention of urine; bloody urine; arterial rigor or spasms of arterioles; acute edemata of various parts (joints); eye-symptoms of various kinds—blinding, conjunctivitis, keratitis, iritis, cataract, dislocation of lens,



etc.; ear-symptoms—rupture of tympanic membranes, deafness, bleeding, epistaxis; thermal symptoms—usually a rise of temperature to 38 degrees to 39 degrees Centigrade; amnesia; neuritis, etc.

**TO REVIEW:** Death by electricity may be preponderatingly due to heart paralysis, with fibrillary contractions of this organ, or to asphyxia, or both combined. The cessation of respiration is a secondary phenomenon, though usually simultaneous with the cessation of normal heart action. The curious fact to be borne in mind is, that in the case of a good contact with a high-tension current there is usually no paralysis of the heart, but only respiratory failure. In such cases respiration may be established spontaneously; if not, artificial respiration must be employed. As a rule, however, in accidental cases, the contact is usually a poor one, the tension of the current which actually traverses the victim is comparatively low and paralysis of the heart is more sure to ensue. In such cases artificial respiration proves futile.

The prognosis is good only in cases where there is some heart-action and respiration—heart-action particularly. But, as in so many cases of resuscitation of the drowned, efforts must be instituted promptly to induce these vital mechanisms to act again. The stricken individual must, of course, be taken out of the circuit if he be not already freed from it. Bystanders can do this with rubber gloves, or with hands wrapped with thick, dry, woolen material, by pulling at the victims clothing, by sticks of wood, or, if in contact with a wire, this may be cut with a nipper with insulated handles. This must be done with caution, as the momentary arc formed between the separated ends may blind the rescuers.

Once freed from the menacing current, the patient should be laid with head a little higher than the rest of the body in order to prevent more serious blood extravasations, and artificial respiration should be begun promptly. This is more effectively done by compressing the thorax with the hands applied flat to the sides and lower part of the chest than by the raising and lowering of the arms. This is to be continued at the rate of eighteen per minute. Care must be taken not to force the stomach contents up into pharynx and thence into the air passages. The tongue must be drawn forward so as not to obstruct the larynx. Heart action may be augmented by massage over the heart reg-

ion, by faradization (applying the electrodes to the neck and to the heart region) by adrenalin injection as practised by Crile and his associates.

The value of adrenalin in raising blood pressure had already been thoroughly established, but different methods of introducing it into the circulation are followed by different results. Intravenous injection, while easy and practical, has the following disadvantage: The adrenalin first comes into contact with the vessels least capable of influencing the blood-pressure, and before a material rise could be effected by its action upon the arteries the solution must of necessity pass through the right heart, the lungs, then back to the left heart on its way to the aorta, thence affecting directly the coronary arteries. This too often causes an accumulation of solution and blood in the dilated paralyzed chambers of the heart, defeating resuscitation.

Now the researches of Sollman, Crile and others have shown that the inauguration of the heart-beat depends more upon the physical factor of the increased pressure in the coronary arteries than upon the quality of the fluid producing such pressure. Sollman was able to inaugurate cardiac beats by perfusing the coronary arteries with metallic mercury under a pressure of 30 to 40 millimeters. It was impossible to raise the coronary pressure in the intact animal to this height by means of cardiac massage alone, or by the mechanics of infusion alone, and generally impossible by both methods combined. Crile and Dolley then thought that the most direct and effective way of producing coronary pressure of 30 to 40 mm. (of mercury) was by introducing a solution of adrenalin into the arterial system toward the heart. Crile and Dolley attained a rapid rise in the arterial pressure by such a centripetal arterial infusion with a therapeutic dose of adrenalin, together with good artificial respiration and the avoidance of unnecessary cardiac trauma by massage. The limitations of the method which these experimenters encountered were: (a) ante-mortem clotting of the blood; (b) over-distention of the heart; (c) later failure of the heart and respiration, usually gradual in onset in from three to twenty hours. The causes of this later failure are not understood and resuscitation is useless.

The method just described could not be resorted to in most cases of accidental electric shock, as the necessary apparatus

would have to be on hand and in readiness. Artificial respiration is, therefore, the first resort. Occasionally the epiglottis should be tickled with the forefinger. This is a modification of the tongue-traction method of Laborde—first suggested, I believe, by Freudenthal. This procedure I found efficacious in two firemen who had been overcome by smoke. Vomiting may be induced by this method, but may operate, reflexly, in exciting the respiratory mechanisms into renewed action.

Among other methods that have been suggested as aids in resuscitation are lumbar puncture, venesection, the application of the Leduc current or of a high tension shock of short duration.

Inasmuch as it has been observed that the intradural pressure is usually inordinately high, lumbar puncture may be resorted to in order to relieve the pressure upon the brain and spinal cord. Venesection may sometimes be indicated; the danger of air-embolism must, of course, be borne in mind. The application of the Leduc current has been suggested by Robinovitch. This consists of the application of a direct but intermittent current of a duration of one-tenth second every second or two, of low voltage (14) and moderate frequency (110 alternations). It is useful in asphyxia cases, but is probably useless when the heart has been paralyzed. Success depends upon the promptness of the application of this method.

I have already cited Prevost and Battelli to the effect that the condition of fibrillar contraction paralysis of the heart is best elicited by the application of low tension currents, and that the momentary application of a high potential current—if applied soon—may call forth renewed regular heart action. A procedure of this kind should, of course, be the "last resort."

The most important factor in attempts at resuscitation is promptitude in the application of resuscitative measures. Crile and his associates have shown that in resuscitation after 7 to 10 minutes after apparent death, that, while respiration and circulation may be established satisfactorily, consciousness is not regained. There is apparently imperfect recovery of the brain proper after a cerebral anemia of about seven minutes' duration.

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If a scalp wound extends through the periosteum it is safest to sew the periosteal wound at once and leave the scalp unsutured for twenty-four hours. Fracture should be excluded, if possible, before closing the periosteum.—*American Journal of Surgery*.

A small, hard, irregularly nodular scalp tumor is very likely an endothelioma. A little section should be removed under local anesthesia for microscopical examination. If the diagnosis is corroborated, radical removal is necessary.—*American Journal of Surgery*.



## THE UTERINE CURETTE; ITS USES AND DANGERS.

By **Charles L. De Meritt, M. D.,**  
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Of course you will not look for anything new or unusual under this commonplace heading. The main value of a paper on such an ordinary topic is in the discussion it originates, whereby the individual lessons learned and technical points devised by each operator become the common property of all.

In speaking of curettage as a commonplace operation I do not mean to make light of it. It is probably performed oftener than any other surgical undertaking really worthy the name of operation. I well remember my first curettage. It was a case of three months miscarriage, the patient weak and anemic from hemorrhage, my only assistant her husband, who stood beside the bed holding a kerosene lamp and smoking a pipe. It was my first surgical venture, and I approached it with more trepidation than I did my first abdominal section. And I have always retained a wholesome respect for the procedure and a deep appreciation of its seriousness.

It is one of the operations which from necessity remain mostly in the hands of the general practitioner. Mechanically it amounts to the scraping of the inside of a musculo-mucous sac by the sense of touch alone. The character of this sac varies from the small, rigid, thick-walled, non-pregnant uterus to the large, relaxed, thin-walled organ of the post-partum state.

The uterus is one of the few body cavities which it is neither practicable nor desirable to explore visually. While the surgical specialist in his marble amphitheatre views the interiors of the bladder and rectum with his electrically lighted cystoscope and proctoscope; opens the cranium, thorax and abdomen and sees their diseased contents, and even exposes to his ocular inspection the cavities of the stomach and gall bladder, the general practitioner, called out at night to empty a septic uterus, operates in the dingy kitchen of a tenement, often without professional assistance, with only the sense of feeling communicated through the handle of his curette as a guide, and with only a thin, easily perforated wall of diseased and

flabby muscle and mucosa between a deadly focus of infection and the peritoneum. Is not the latter task in many ways the more difficult? Curettage should rank as a major operation and we should not only so regard it ourselves, but we should impress it on the laity as such, for they look on "scraping the womb" as a trivial matter and give credit to the operator accordingly. And this attitude is fostered by the careless way some doctors operate. They seem to think that nothing short of celiotomy is worthy of the careful preparation and painstaking attention to details which the true surgeon gives to all kinds of operations, great or small.

In preparing patients for curettage as well as for other intra-vaginal operations, one important point should be borne in mind. The vulva is a favorite habitat for pathogenic germs; the vagina is not. The preliminary scrubbing and shaving of the external genitals is almost certain to force some soapsuds freighted with these germs into the vagina or at least between the labia minora, from where subsequent manipulations may carry them further upward. Hence, vaginal cleaning and disinfection are important, not merely to remove or destroy such microbes as may by chance or through disease have previously acquired a residence in the vagina, but also to remove such as may have been accidentally introduced during the cleaning of the external parts. After scrubbing the vagina, flushing by pouring an antiseptic solution into it while it is widely distended by the surgeon's fingers is far superior to douching. Where a lacerated or eroded cervix complicates the case painting the raw surfaces with tincture of iodine is an additional precaution well worth taking before introducing the dilator or curette.

Of the many styles of curettes in use, three seem to fill all indications; the sharp ring (of which the Sims is an example, and probably the most used of all forms), the sharp spoon, and the dull spoon. The largest instrument of any style that will freely pass the cervix and admit of free motion within the cavity of the body is the best, the work being accomplished quicker thereby.

Dilation of the cervix, regarded as necessary in most non-pregnant uteri, and in some cases of abortion, particularly early ones, is not merely to get room to pass a proper-sized instrument. Another important point it accomplishes is facilitating drainage, thereby diminishing the chance

of retention (and in clean cases infection) of clots or shreds of detached endometrium. Hence it should be thorough enough to insure the cervix remaining fairly patulous for some hours at least after operation. In tight, elastic cervixes that persistently contract after removal of the dilator, incision is certainly the proper practice. It is not always necessary in these cases to slash through the whole cervix with scissors, thereby producing a condition similar to parturient laceration, which in septic cases at least cannot be repaired at the time, and which in any case is an undesirable complication. Bilateral incisions made carefully with a narrow-bladed knife from within outward will, as many have found, give enough dilation without cutting through the whole thickness of the cervical wall, and the outer portion of the cervix remains as a stay, to prevent gaping of the severed os.

Stretching with the branched dilator is probably, oftener than we imagine, more of a laceration than a dilation. I dilated a uterus removed for early cancer of the body, the cervix being normal. The cervix began to tear when the blades reached a separation of 1.5 cm. at the tips, an amount of separation commonly exceeded in operative work. The safer method of dilation is doubtless by Pratt's graduated bougies. Otis' short-beaked urethral sounds answer almost as well.

Either the ring or spoon will satisfactorily clean the front, back and side walls of the uterine cavity. D. C. Gilliam has called attention to the fact that the sharp ring of the Sims type will not properly scrape the fundus, because the cutting edge, being directed obliquely downward, glides over the surface here without engaging it. Hence the fundus should be scraped with a spoon.

Recently I hardened a uterus removed by a colleague, split it along the anterior surface, dried it thoroughly, painted the cavity with a heavy water color, and closed it again. Then I used a Sims sharp ring curette as I would ordinarily do in the living subject. Examination of the cavity on re-opening, showed the anterior, posterior and lateral walls to have been pretty thoroughly denuded, the fundus imperfectly so, and the cornua not at all. The cavity was again painted and closed and the curetting repeated with a small, sharp spoon. This time the fundus was thoroughly scraped at the centre, less thoroughly toward the sides, and the cornua

were still almost untouched. I think the cornua mostly escape contact with the curette as the operation is ordinarily done, and it may be well that they do.

While the value of curettage in miscarriage with hemorrhage from retained conception products and without infection is generally admitted, its advisability in septic cases has, of late years, been much questioned, and the most capable obstetricians and surgeons now seem to deny it. My own opinion is based on and upheld by the results of my own work. It is in favor of curettage in septic cases up to three or three and a half months, and more conservative treatment at later dates. I have curetted many of these early cases when they have had fever, and symptoms have always subsided on removal of necrotic conception products. I have not had one case turn out badly, and I know other men whose experience has been similar. But at more advanced periods of gestation I have no such good results to report from curettage of the septic uterus—no death in private work, but several in hospital practice which make me wish the reaction against curettage as a universal procedure, irrespective of conditions, had set in sooner. Now, in these late abortions with sepsis (the great majority of which, by the way, I believe to be either self-induced or the work of criminal operators) I follow the approved practice of exploring the uterine cavity gently with sponge or placenta forceps. I detach such retained material as can be removed without undue force, and for the rest, depend upon frequent swabbing with tincture of iodine to keep the endometrium and any attached masses of infection at least partially sterile, until loosening and expulsion of the offensive tissue shall occur naturally. I never introduce the finger. I regard it as a bungling act, sure to produce more or less traumatism, thereby favoring the spread of infection. Nor do I douche such cases, in fact I have not used a uterine douche for any purpose whatever, except post-partum hemorrhage, in several years.

Going back to the time of utero-gestation as an indication for or against the curette in sepsis, my view that curettage is more liable to be followed by systemic infection in late than in early periods of pregnancy, would seem to be supported by physiological evidences as well as by clinical experience—for there is a progres-



sive development of the uterine lymphatics with the advance of pregnancy.

During the past year I have treated three cases of gonorrhea in women by curetting the cervix clean before instituting the local treatment. This treatment, which I think is still regarded by most surgeons as being in experimental stage, is based on the pathological fact that the cervix is the main seat of gonorrhea in the female. The main objection raised to the method, that it risks upward extension of the infection, I do not believe holds good if the curettage is followed by the thorough disinfection of the entire uterine cavity with tincture of iodine.

## PENETRATING WOUNDS OF THE ABDOMEN.\*

By **Walter P. Glendon M. D.,**  
**Cedarville N. J.**

In no other department of medicine has science made greater progress, or enabled the physician to secure more brilliant results in his work, than in the treatment of disease and injuries of the abdominal viscera. The development of a technique almost faultless in its perfection, based on the principles of asepsis, has made possible the successful management of a class of injuries that were formerly considered almost absolutely and universally fatal.

The doubt and uncertainty in connection with the proper management of the class of injuries, forming the title of this paper, that made the doctor of the past so helpless in such an emergency, has been dissipated through the efforts and work of a host of brilliant workers, and chief among which was that peerless surgeon, the late Nicholas Senn, and now professional opinion has crystalized in the conviction that prompt and thorough operation is the only measure that offers the victim any show for his life. Nature often cares for a gangrenous appendix, and operation may be safely deferred until the abscess is walled off and protected by adhesions, but when confronted by a situation so grave as wounded viscera or perforated intestine, hesitancy and doubt mean delay, and usually spell disaster for the patient.

The profitable experience gained, together with the desire to emphasize the necessity for prompt operation, leads me to report the successful result in one case

of a penetrating wound of the abdomen coming under my observation, and to describe in detail the treatment that secured the result. During the month of October, 1907, two boys employed in a near-by glass house became involved in a quarrel, when one of them, an Italian, stabbed the other, a negro, in the abdomen with a stillito. I saw the victim shortly after the affray in consultation with Dr. H. E. Lore, of Fairton, N. J., and it then being evident that the case was of too serious nature to be treated at home, the boy was placed in an automobile and conveyed to the Bridgeton Hospital, about four miles distant. Upon arrival there the patient was in a very grave condition, his pulse was rapid, wiry and barely perceptible at the wrist. The features were pinched and drawn, and the skin had the cold, clammy feel of shock. There was no complaint of pain, but the patient presented the classical appearance of shock so lucidly described by Hippocrates.

On examining the abdomen, a clean cut incised wound about three-fourths of an inch in length was disclosed, located about one inch below the navel and directly in the median line of the body. There was no evidence of bleeding externally, the orifice of the cut being effectually plugged with a strip of omentum about one inch long that protruded from the abdominal cavity. As the patient was in such a serious condition immediate operation was advised, and this opinion having been concurred in by Drs. Lore, Loper, Sewall and Charlesworth, members of the surgical staff of the Bridgeton Hospital, the patient was prepared for operation, and with the assistance of the above-named gentlemen I commenced what might not inaptly be designated a premature autopsy on a living body.

A long incision extending through the wound of entrance was made, and after the section of the peritoneum had been effected, moderately distended and congested coils of intestines immediately protruded from the wound. A portion of the ileum near the cecal termination was selected as a starting point, and a systematic and thorough search of the bowel for injuries was begun. A short distance from the place of beginning two perforations were found, and after a search that continued from the ileo-cecal junction to duodeno-jejunal flexure, four more incised wounds were found, each and every one of which completely penetrated the whole

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thickness of the gut into its lumen. There was free oozing of blood from the cut edge of the bowel, but owing to the eversion of the mucous membrane there was no apparent escape of fecal matter into the abdominal cavity. The wounds in the bowel being small they were effectually closed by purse string sutures, reinforced where necessary by the introduction of interrupted sutures to secure accurate coaptation of the serous coats and secure the wounded vessels. As no more injuries of the bowels were discovered they were returned to the abdominal cavity and the preparation made to close the parietal wound, but no sooner had the viscera been replaced than the blood fairly welled up out of the depth of the wound.

It was clearly evident that we had failed to repair the whole extent of the damage and a further search was undertaken to discover the bleeding points. The whole of the small intestines were then turned outside of the abdomen and protected by gauze compresses wrung out of hot saline solution during the necessary manipulations. When the bowel was raised sufficiently to reveal the root of the mesentery, two more wounds were found in its peritoneal covering near the point of origin along side of the vertebral column, severing some of the mesenteric vessels in its course; the point of the blade was arrested against the bone in dangerous proximity to the abdominal aorta. The blood welled up in a stream from these vessels when the parts were relaxed, but when put on tension, as they necessarily were when pulled up, the flow of blood was greatly diminished, and this circumstance added an element of confusion to the operation. I could not understand why the bleeding should stop while the intestines were out of the body and recur as soon as they were returned until visual inspection made the explanation easy. Ligatures promptly controlled the hemorrhage and, after securing a wounded vessel in the omentum, the viscera were replaced in the abdomen and the wound was closed in layers down to the lower angle where a narrow strip of gauze was inserted for drainage, a useless precaution, however, as afterwards proved to be the case, for union was complete throughout without any rise of temperature or other indication of infection, and the patient was discharged from the hospital in five weeks perfectly well.

During the course of the operation dis-

solution seemed imminent from hemorrhage, and about twenty-eight ounces of salt solution were infused into the median basilic vein. The boy was put to bed in a very bad condition, pulse almost imperceptible at the wrist, and too rapid to count, while the respirations were rapid and shallow, but under vigorous stimulation he reacted well, and in the evening the pulse had fallen to 120 with a fairly good volume.

The experience in this case taught me the necessity for prompt and thorough operation, as the only safe and intelligent treatment for these injuries. Only the most careful and painstaking search will enable the operator to determine and locate the extent of the damage, and to do this expeditiously means complete evisceration of the patient and a systematic search inch by inch of the whole intestinal tract, as the overlooking of a single injury would most likely defeat the object of the operation and convert a possible success into failure. Turning the bowels outside of the body, providing, of course, they are handled carefully and properly protected by hot wet towels during the necessary manipulations, does not seem to intensify the danger from shock and infection, and the expedient is certainly of great assistance to the operator in making an accurate and rapid search; and, further profiting by the foregoing experience, when trying to locate a bleeding point, the fact should be remembered that when the parts are put on tension the hemorrhage may be temporarily arrested to recur again as soon as they are restored to their normal position.

We are taught that the escape of fecal matter will greatly add to the danger of an injury of this kind, but here again we see the beneficent action of nature in the effort to guard against this accident, by the eversion of the mucous membrane, which acts as a barrier against fecal extravasation. In the case just cited the perforations, some of which were half an inch in length, were effectually plugged by the eversion of the mucous membrane, so that for a while at least, it would hardly be possible for the contents of the bowel to be forced out, and as a further safeguard against this accident the arrest of all intestinal movement, as a consequence of the paralyzing effect of the injury to the sympathetic system greatly lessens the possibility of any escape of fecal matter.

The time of operation is another impor-



tant connection with the success or failure of treatment in these cases, and I am firmly convinced that the satisfactory result achieved in the above case was largely due to the circumstance that no time was lost in getting this boy on the operating table; as a matter of fact, he was operated on within one hour after receiving the injury. The mortality after unoperated penetrating wounds of the abdomen is variously estimated at from 60 to 80 per cent., and the operative mortality based on the time at which the operation is done, is said to be from 25 to 70 per cent.; that is to say, cases operated on within two hours give a mortality of 25 to 30 per cent.; within four hours 40 per cent.; within six hours over 50 per cent.; within eight hours over 60 per cent., and within twelve hours over 70 per cent.

Gastro-intestinal injuries involving perforations are, with very few exceptions, mortal wounds, the existence of which can leave no doubt in the mind of the physician that prompt surgical operation offers the only chance of saving life, reserving the expectant treatment for the cases seen late and those in which the environments are unfavorable for operation, although in these days the cases of the latter class are fortunately very few indeed.

Some few further remarks might be added on the diagnosis of these injuries, and at the outset it may be said without fear of contradiction, that in many of them the diagnosis cannot be made with even approximate accuracy without enlarging the wound and making a thorough search. Snock is a very variable symptom; it was well marked in this case, but I have seen one fatal case of laceration of the bowel where it was entirely absent, and it is very often absent in individuals of great personal fortitude, in spite of grave visceral lesions. When marked and persistent, however, and when coupled with nausea and vomiting it becomes a sign of considerable diagnostic importance, and generally indicates the existence of internal hemorrhage. Muscular rigidity, when present, is sometimes of doubtful significance in determining the gravity of the injury, for it may be, and often is, present in severe contusions of the abdominal muscles when there is no visceral lesion, and, on the other hand, it may be absent after fatal damage has been inflicted.

In summing up these conclusions it seems rational to formulate the rule, that every penetrating wound of the abdomen

with visceral lesion of the gastro-intestinal canal large enough to permit of extravasation that is not immediately fatal from shock and hemorrhage, and when surgical skill and fair hospital facilities are available, should be dealt with by promptly enlarging the wound for satisfactory exploration and the repairing of any injury that may be found. Fortunately, these injuries are rare in civil practice, but nevertheless they do occur with sufficient frequency to behoove us to be able to indicate the most promising management and adopt the measures that insure the best results in saving life.

## PSYCHO-NEUROSES OF THE MOTOR CAR.\*

By Walter Dodge, M. D.,  
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This paper was suggested by that remarkable work of Dr. Seibert's "Accidents and Injuries of the Automobile" (in three vols., and sold only by subscription.)

The psychic field is a large one, and can only be outlined in such an article as this. The present paper will confine itself to a consideration of the purely functional diseases of the modern motor car, and will leave out of account the anatomic and surgical lesions except as they throw light upon the psychic status.

The diseases considered are those most commonly encountered, and therefore of the greatest interest to the physician. They are: Neurasthenia, Hysteria, Melancholia, Hypochondria, Paranoia. They have one factor in common, auto-suggestion.

### NEURASTHENIA.

This disease is not confined to any make, age or color of car. Heredity plays but a small part. Climate is of no importance. There is usually a history of exposure to wet or cold, and sometimes of overwork.

Onset may be acute or gradual and may appear at any time after the car leaves the dealers' hands.

Symptoms—Hyperfatigueability is the cardinal one. Shown by feebleness of motor activity and a reticence about going in public. Every act seems an effort and upgrades are negotiated with extreme difficulty. There is a tendency to lie down at the slightest obstacle presented.

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Digestion and assimilation become faulty and the dejections assume a dark, sooty and highly offensive character. The gait becomes halting and slow, with frequent stops.

Examination—Reveals little or nothing to account for these symptoms. A sooted plug, a loose connection, a little water in the carburetor, seem to hold a promise of speedy relief by their correction, but alas, the symptoms remain unaltered! So far as the medical eye can perceive the cause remains a mystery.

Course of the disease—The attack may be short with a rapid convalescence, or it may drag out a long and weary course. The symptoms may not be constant, there being periods in which a sense of well-being manifests itself, but these are of short duration and quickly give place to the psychoses above outlined. There are days when it becomes impossible to get the patient to leave the house.

Diagnosis—Simple and easily made. One glance at the running-gear will show that the machine is completely tired, and this is the keynote of the disease.

Treatment—This should be gentle and kind in the extreme, for harsh measures run the risk of adding physical lesions whose subsequent repair only add time and financial anguish to the period of convalescence. The old method of treating this disease with enormous doses of profanity is unscientific and prejudicial to the professional standing of the physician, to say nothing of the fact that it never hastens a cure.

Consultation may help at times, but beware of those charlatans who infest our communities, having offices in questionable road-houses designated "garage." They are rank materialists, many of them being little better than the old-time "Natural Bone Setters" of our forefathers' times. They know nothing of the soul of the machine and care less, their one object being to amputate your bank account and graft it upon their own financial stock.

Having proved that the disease is purely functional, cease to waste time and effort with a monkey wrench. Go about your professional duties on foot or a-horse-back as though you enjoyed it. Tell your friends you are doing so to reduce your corporation, or because you like it, but never suggest that there is anything the matter with the machine.

Each morning encourage it by turning the crank a few times. This will tend to

instill some of your own confidence into it, and will help to counteract the dominating idea of weariness and inability that possesses it. With a cheerful look, a word of encouragement, and the promise that you will drop in again to-morrow, put on your hat and coat and depart. Some morning your persistently kind treatment will be rewarded by a healthy natural response, and the attack of neurasthenia is at an end. Unfortunately, however, these attacks do not confer future immunity.

#### HYSTERIA.

This is perhaps the most alarming of the neuroses to which the motor car is subject. Alarming, in the sense that the symptoms seem grave at the time, but the mortality is low and the prognosis usually favorable. Nothing is known in regard to the hereditary factor in this complaint as it seems to occur in all families of the genus under consideration. Since all motor cars are of the male gender (as a moment's consideration of their anti-friction devices will prove) it is impossible to say what part sex plays in this neurosis. Onset is sudden.

Symptoms—These are very numerous and erratic. Most common is a more or less complete and sudden motor paralysis. This paralysis is usually not of long duration, but is apt to be repeated over and over again. Or the attack may be ushered in by a convulsive activity of the clutch system, this being of a clonic or a tonic nature. When clonic there is imparted to the car a motion of such character as to endanger the anatomical integrity of the vertebral column. When tonic, law suits are the usual sequellae. It is during one of these tonic spasms of the high speed clutch that a dissociation of the personality is apt to occur, with a consequent loss of memory, and sometimes of life. At such times disturbances of sensation are frequent, their intensity depending upon the nature of the object struck and the speed at which you arrived. They run the whole gamut from a bruise to sudden death. Of a milder nature are the circulatory disturbances. These are usually accompanied by hyperpyrexia and boils in the radiator.

Opisthotonos is a constant symptom, the whole weight of the car being borne on the front and rear wheels while the body of the car is clear of the ground. This may be very prettily demonstrated by crawling under the car. Many do so.

Diagnosis—Simple in the extreme. If



you find yourself asking, "What the devil is the matter with this car?" The answer is "Hysteria," and the diagnosis is made.

Treatment—Keep cool, swear moderately and send for help (the car will run perfectly for any one else). If help is not at hand, walk home. Your family would rather see you on foot than on a shutter.

#### MELANCHOLIA.

In the motor car this is always of the inhibitory type.

There are never any periods of excitement (in the car at least) and the only delusions are those suggested by the man of whom you bought the car.

Prognosis is uniformly bad.

Treatment consists in getting rid of the car at any price or no price.

#### HYPOCHONDRIA.

Found, usually, only in cars of mature age.

Symptoms—May be grouped under two heads: (1) General loss of tone, and (2), Senile decay.

There is a spastic gait, poor circulation, difficult breathing, which may verge upon a Cheyne-Stokes variety, oliguria becomes marked upon standing, incontinence of water, subluxation or even a downward dislocation of the mud guards. Complexion becomes muddy and spotted. The vessels of the circulatory system are prone to sudden rupture with profuse hemorrhage. The spark of youth has lost its power and vivacity.

Diagnosis—Cannot be made from any or even all of these symptoms, but depends upon the fact that they occur serially.

Prognosis and Treatment are the same as for melancholia.

#### PARANOIA.

Occurs almost exclusively in cars costing less than one thousand dollars. Many theories have been advanced to account for this fact, but to date the mystery remains as obscure as the one of "Who Hit Billy Paterson?"

Symptoms—These are confined to delusions of grandeur. So far as is known there has never been a case of the religious type (in fact, they seem to shun the churches and tend to the open country). A few, seemingly well authenticated, cases with delusions of persecution, have been reported in the police records, but such reports can not be accepted by professional men, and so I omit them.

How cars, wearing such small bonnets

as these, can have swelled heads is difficult to understand, but their acts proclaim the inflation of the ego beyond the shadow of a doubt. They are loud and noisy on the street, they love to steal up behind a sedate and quiet Packard, and then dash by with thumb at nose and smoky exhaust, laughing derisively as at a vanquished foe. They adorn themselves with very large and shiny searchlights, and always carry large and blatant horns, hopping thereby to attract attention to themselves. If they carry speedometers these are so arranged as to show a speed of sixty miles an hour on the low gear.

Their cyclometers never register less than ten thousand miles for the season. The sight of a man climbing a telegraph pole is enough to send one of these exalted egos up the next tree. Especially in wet weather their gait becomes swaggering in the extreme, and the whole road is none too broad.

Diagnosis—Should be made from a distance; a balloon being the safest place for observation. A satisfactory diagnosis can often be made by listening to the owner as he recounts his exploits.

Prognosis—Grave! Sometimes several graves.

Treatment—Ninety days for the first symptom, life imprisonment if it recurs.

#### Methods and Results of Drainage in 22 Cases of Abscess of the Appendix.

Dr. R. M. Harbin, of Rome, Ga., in a paper published in the *Medical Record* of January 9, 1909, gives the following conclusions:

- 1.—Statistics of recoveries from drainage of cases of diffuse peritonitis are of no value unless the date of the perforation is known.
- 2.—In the absence of proper facilities, it is better to adopt the Ochsner procedure and the Fowler position, pending consultation.
- 3.—The doubtful propriety of waiting for the walling off process, may merge a certain number of cases into a diffuse form of peritonitis.
- 4.—Deferred operations, under favorable conditions, give the patient time to undergo a sort of auto-inoculation with bacterial vaccines.
- 5.—The uncertain course of peritonitis argues for immediate operation.
- 6.—Infections low in the right iliac fossa can safely be trusted to nature.
- 7.—Short incisions and few manipulations should be the rule.
- 8.—As a rule, it is unsurgical to leave the same gauze in the wound over four or five days.
- 9.—The right lateral and ventral positions are of great value in supplementing other methods of drainage.
- 10.—Drainage in diffuse peritonitis should not only give exit to pus, but should provoke a reverse current of serum out the wound.
- 11.—Intermittent injection of normal salt solution seemed to gain a greater amount of ab-

sorption in the rectum than the instillation method.

12.—In well defined abscess cases there was a mortality rate of 4.5 per cent.

## THE IMPORTANCE OF STUDYING THE CONDITIONS OF THE HEART MUSCLE IN VARIOUS DISEASES\*

**Prof. Hobart A. Hare,  
Philadelphia, Pa.**

Dr. Hare said that it was not his intention to deal with valvular changes, but with changes in the muscle. These changes in the muscle he divided into three classes: (1) Those occurring after acute overstrain; (2) after chronic overstrain; and, (3) months and years after the overstrain has passed away. In the first class, the murmur disappears shortly after the exertion ceases. In the second, it persists until after a long period of rest. It is not enough to diagnose the heart-condition; its cause must be found. The great strain produces the great hypertrophy. After the age of forty-five, the conditions alter. The arteries still remain wide open pathways, but the heart acts less forcibly, and the blood-pressure falls. The final period of life is hurried upon the man, and he becomes prematurely aged in the fibroid changes, resulting in rigidity, which increase arterial tension, particularly when exertion is made and throws a great strain upon the heart, which is unable to meet it. The attempt to do so brings about the hypertrophy of old age. One is frequently consulted by patients prematurely or actually aged, who think that their lack of health depends upon lack of exercise, when it depends upon other causes that should

(\*The above was the title of a very able paper presented at the 142d annual meeting of the Medical Society of New Jersey, at Cape May, June 19, 1908, by Professor Hobart A. Hare, M. D., of Philadelphia. It was given to the foreman of the publishing company that formerly printed our Journal, about the time the company was reorganizing with change of ownership and pressman, and was lost in their office. Professor Hare was in Europe at the time, and on his return we hoped to find that he had a duplicate copy, but he had not, and very kindly expressed his desire that we should not give ourselves any anxiety about the matter, that the facts certainly absolved us from criticism and that such accidents would occasionally occur. The paper was one of the best, most practical, presented at the meeting and its loss is most deeply regretted. We give the very brief synopsis of it that was made at the time and the discussion that followed.—Editor.)

be corrected. It is one's duty to prevent these patients from taking excessive exercise.

### DISCUSSION.

Dr. Philip Marvel, of Atlantic City, opened the discussion on Dr. Hare's paper. He thought that the majority of those present would agree with him that Dr. Hare had so carefully covered the subject of his paper that there was little left for Dr. Marvel to discuss. If he had followed Dr. Hare correctly, Dr. Marvel thought that he might, in opening the discussion, lay some emphasis upon the three divisions of the subject that the author had endeavored to bring to the attention of the Society as most important for their consideration. The first point upon which stress had been laid was those myocardial changes that arise from within the circulation; the second, those that arise outside the circulation primarily; and the third, those conditions that seem to have their origin primarily within the nervous system or some disturbances of nutrition reflected through the nervous system. In the first division, changes arising in the circulation, Dr. Marvel said that a subdivision into, first, those attacking the endocardium, and, second, those attacking the myocardium, must be dealt with. Dr. Marvel said that Dr. Hare had purposely separated his subject from these endocardial diseases. Taking up those of the myocardium, Dr. Marvel said that one is often dealing with results of some infectious disease, perhaps; though not with the end results. This infectious disease has preceded the first evidences of heart trouble to which Dr. Hare had referred by perhaps several years, and these cases may have had their origin in influenza, typhoid fever, diphtheria, or similar infectious disease. Dr. Marvel said that he had been forced more and more each year to conclude, from many of the cases that he sees, that the heart-conditions sometimes have their origin purely from a toxemia—not from a toxin, but from those conditions that arise from overfeeding, from disturbances that are peculiar to overloading of the economy. He wished to make a distinction between toxicemic causes and toxic causes. By the first, he meant the conditions arising from bacterial changes peculiar to the food; and by the second, he meant those conditions arising from bacterial causes external to the body. Toxicemic causes, he said, may be bacterial; but they are from the bacteria of the intestinal tract, and not from those extraneous to it.

Referring to the second class of cases, those that arise outside the circulatory organs, Dr. Marvel said that there is a mixed condition present. Primarily, there is the involvement of the circulation, as Dr. Hare had stated, in the sclerotic changes in the vessels. There is also the nutritive change, which is taking place simultaneously with the sclerotic change, and involving the muscular fibers of the myocardium itself. Hence, in this class of cases there are operative more than the causes that affect the heart from within the circulation.

In regard to the third division, those that arise primarily from disturbances of the nervous system, it seemed to Dr. Marvel that in this instance one has to deal with causes of



which the profession has little definite knowledge. They may have had their origin years before the cases are seen, or the individual may have been subjected to a severe strain.

**Dr. Martin J. Synnott, of Montclair,** expressed his thanks to Dr. Hare for his valuable and instructive paper. The subject, Dr. Synnott said, had been covered so exhaustively, learnedly, and scientifically that it was very difficult to add anything of importance to it. In fact, he felt very modest in making any attempt at a formal discussion, and said that he would only refer briefly to a plan of treatment bearing more or less directly upon the alleviation of heart disturbances, particularly diseases of the myocardium and derangements of cardiac nutrition. He referred to the effect of hot CO<sub>2</sub> saline baths, as administered at Nauheim, Germany, especially when combined with special muscular exercises and so-called resistance movements. He had within the past three years had several patients treated at Nauheim and at the American (artificial) Nauheim of Watkins Glen, New York. The results had been sufficiently encouraging to convince him of the efficacy and merit of this plan of treatment. Myocardial derangements, he said, respond most readily to this form of hydrotherapy. The best results are obtained only from a visit to Nauheim, but the baths can be administered at home. This should be done only after a careful study of the requirements of each individual case, and the indications for saline and soothing baths, or the effervescing and stimulating baths. The effect of the CO<sub>2</sub> seems to be to stimulate the heart to more vigorous condition, it improves the tonicity of the cardiac muscle and lessens the area of heart dulness. The temperature of the baths is important and should be graded gradually from hot to lukewarm and then to cold. When the baths are used at home—which is entirely practicable—the same degree of beneficial results are rarely obtained, even in suitable cases. The reason for this are obvious.

**Dr. Alexander Marcy, Jr., of Riverton,** said that he would like to emphasize the matter of absolute rest in many of these cases of myocardial disease, particularly the acute variety. A great many volumes, he said, have been written upon the subject of exercise, but that of rest has been practically lost sight of. In many cases the most important question in the treatment is absolute rest for a sufficient length of time to allow the myocardium to recover its tonicity.

**Dr. Hare,** closing, said that there was one point that he would like to add to what he had said: In persons whose general systems are not much tired, but whose hearts are; by listening to the heart, one may find that the body is tired because the heart-sounds are tired. There is, he said, no better gauge of the condition of muscular and nervous tone than a careful study of the heart-sounds and the arterial tension. Frequently patients suffer with various disorders of the circulation or of nervous equilibrium, without having any actual disease. There is simply a lack of nervous tone or of proper control over the nervous system of the heart and blood vessels. Dr. Hare was impressed with the fact that a large proportion of so-called cardiac cases are not dependent upon a

valvular lesion, even when a murmur is present. In a large proportion, the condition is due to relaxation of the mitral or tricuspid orifice. A large number of cases supposed to be arterial spasm are due to spasm alone, without any fibrosis. Dr. Hare had recently had for a patient a woman who had traveled all over the world, because she had been told that she had hardening of the arteries. The fact was, however, that she did not have arteriosclerosis at all. She had consulted a number of specialists abroad, as well as equally eminent men in this country. Dr. Hare knew that she had had an extraordinarily strenuous life; and, going on the principle that her cardiac hypertrophy and vascular condition were due to a tired heart, rather than arteriosclerosis, he put her in bed and gave her large doses of bromide. She can now walk two or three miles. He had diminished the labor thrown upon the heart. He said that the most important lesson that can be learned in such cases is to study the cardiac sounds, not in connection with murmurs, but as indicative of the general tone of the circulatory system.

### THE VALUE OF THE X-RAYS IN CHEST DIAGNOSIS.\*

By A. L. Gray, M. D., Richmond, Va.

In the determination of conditions existing within the thorax, every procedure that will add to our very imperfect methods should be accorded a most hearty welcome.

While there are specialists who can, after years of the most assiduous application and wide experience in chest examinations, recognize very slight abnormalities with a wonderful degree of accuracy, such men are rare, and often their findings are not treated with the respect due them, for the reason that the doctor referring the case, is not sufficiently trained in physical diagnosis, and cannot, himself, detect the points elicited by the chest specialist.

There are conditions that, by reason of their size and location, even the most skilled physical diagnostician cannot possibly ascertain, while their recognition at the onset may mean the arrest of the disease before it is beyond control.

It is my desire to call to your attention the applications of the X-Rays as an aid in discovering with accuracy points difficult or impossible of demonstration otherwise.

**Thoracic Aneurysms.**—Although an early diagnosis rarely, if ever, enables a complete cure to be effected, the patient's habits of living may be so modified and treatment so instituted in consequence thereof, that life may be prolonged or even the progress of the aneurysm arrested.

A thoracic aneurysm found by the X-Rays in a woman in the sixth month of pregnancy, caused me to advise the induction of miscarriage. The operation was successfully performed and the patient spared a probable sudden death during labor.

Aneurysms have been often found when their existence had never been suspected, and the

\*Read before the Medical Society of Virginia at its Thirty-ninth Annual Meeting, October 20 to 23, 1908. Taken from the Virginia Medical Semi-Monthly.

radiograph was made for an entirely different reason.

Pain in the region of the large blood vessels, persistent aphonia, huskiness of the voice, bronchorrhoea, areas of deep-seated tenderness near the sternal or in the intrascapular regions, when the cause is not clear, should always be suggestive of thoracic aneurysm.

**Pleuritic Effusions.**—Though these are usually easy of diagnosis, they are sometimes very difficult.

It has been my fortune to test the utility of the X-Rays in a considerable number of cases of hydrothorax and pyothorax, and in a single case of haemothorax, the result of a bullet wound.

In hydrothorax, which is the most common of these, the level of the fluid, if it is not walled off, shows distinctly in the radiograph, usually as a fairly sharp defined line above which are the shadows of more or less normal lung tissue, which below is the denser and more diffused shadow due to the greater difficulty encountered by the X-Rays in penetrating the fluid. The ribs appear much less distinct.

In localized pleuritic effusion, where adhesions have formed a distinct wall which encloses the fluid, the thickened pleura, as well as the fluid, are generally easily recognized. If the effusion is great, there appears in the lung tissue itself, especially in that portion near the fluid, an increased density due to compression.

What has been said of hydrothorax may likewise be said of empyema, except that the pus shadow is more dense than in hydrothorax, and often the shadows of the ribs are entirely obliterated.

Pneumothorax is readily determined by the absence at the site of the air, of even the normal shadow of the lung.

Abscesses within the lungs are distinguishable by appearing as very dense, generally single areas shading off into the surrounding lung tissue.

A difficulty which occasionally presents itself is the risk that the patient may undergo in being placed in the upright position necessary in diagnosing general effusions. Rarely indeed will a case be seen in which the danger would be too great to permit the sitting posture in bed for the short time necessary to take the picture. Such a condition, however, does sometimes occur and renders the diagnosis of free fluid quite difficult.

**Tumors and Enlarged Glands.**—Tumors of the lung tissue generally produce dense, often sharply defined areas of more or less irregular outline, not unfrequently multilocular. They may be distinguished from abscesses, which they most resemble, by the absence of fever, and by the result of a blood examination.

Mediastinal and bronchial glands appear as rounded or oval shadows with clear cut borders. They may, if large, be mistaken for small aneurysms, and must be distinguished, if there is doubt, by fluoroscopic examination, when the expansile pulsations may be seen.

**Tuberculosis.**—It is in tuberculosis that the X-Rays have begun to open a new field. X-Ray operators everywhere have in the last few years turned their special attention to the early recognition of this disease by radiographs. Many

cases have been reported in which the chest specialist has failed to determine any physical signs—long before the appearance of the bacilli in the sputa—in which an unqualified diagnosis of pulmonary tuberculosis was made and the subsequent course of the disease verified the findings.

With the present almost instantaneous work that the recent machines are capable of doing, an exposure may be made while the breath is held and the smallest area of consolidation of the disease determined by comparing radiographs made from time to time. Cavities in areas may be studied and progress or recession demonstrated. In advanced tuberculosis in which there is considerable consolidation, the will appear distinctly on the picture. Isolated tubercles, minute calcified glands and thickening at the roots of the lungs can be clearly the lungs, their size, location, and whether or not they are being walled off are all points that may be shown by a good radiograph.

In chest examinations for tuberculosis it is not sufficient, as is often done, to make a single picture with the plate behind the thorax, for images of small solid areas in the anterior portion of the lungs, may be indistinct by reason of their distance from the plate.

In order to obtain a clear impression, it is of equal importance that a picture be made with the plate in front.

Restricted motion to the diaphragm on the affected side, (Williams' sign) which was formerly considered of great value in the diagnosis of early tuberculosis, has proven to be unreliable. This is easily demonstrable by an X-Ray examination, but is not always present in the earliest manifestations.

The heart may also be outlined, and its size and positions ascertained. This is best done by the employment of the ortho-diaphragm, which also enables the diaphragm and other structures to be most accurately charted.

The location of foreign bodies in the oesophagus and respiratory passages is of such frequent occurrence as to require no comment in this necessarily brief paper.

## OBSTRUCTION OF THE BOWEL.

(From the *West Virginia Medical Semi-Monthly*.)

Abstract of paper by Charles T. Souther, M. D., read before the Mississippi Valley Medical Association October, 1908.

The following classification is offered as a concrete way to study the subject etiologically: Obstruction always mechanical.

### INFLAMMATORY.

Small Bowel: Appendicitis; post-operative peritonitis; tubercular peritonitis; volvulus. Pelvic Peritonitis: Intussusception; gall-bladder. Large Bowel: Tuberculosis; colitis, diverticulitis; stricture; syphilis; bands and adhesions.

### NON-INFLAMMATORY.

Small Bowel: Polypus; volvulus; Meckel's diverticulum; ileus; hernia, tumors and cancer. Large Bowel: Polypus; malignancy; benign tumors; hernia; pressure of tumors outside the bowel.

The classification disposes of the etiology.



Diagnosis: (1) Abdominal pain; (2) Inability to move the bowel; (3) Distension of bowel, and (4) Vomiting.

The aggregate of the four symptoms means obstruction.

Dilatation of the stomach is differentiated by the stomach tube.

Primary distention may be the cause of volvulus and obstruction.

The cardinal symptoms appear early or late, acute or chronic, depending on the presence of inflammation or no inflammation.

The use of gauze pads and drains in operative work should be avoided as much as possible, owing to necessary peritoneal trauma.

Age, sex, duration and mode of onset help to classify the case, as acute or chronic, inflammatory or non-inflammatory. Early in life usually is inflammatory. Late in life usually non-inflammatory, and due to gall-stones, enteroliths, malignancy or fecal impaction.

Obstruction of the small bowel means more acute symptoms and early surgery. Large bowel, slow symptoms and lower operative mortality unless the acute cases are operated very early. Monroe and others claim that all cases become inflammatory before a fatal issue, and that infection and bacteria will be found post-mortem in all cases, if the glands are examined.

#### TREATMENT.

Medicinal...Cathartics.

Mechanical...Enemas,

Position,

Massage.

Surgical....Enterostomy,

Colostomy,

Complete causal Operation.

Should cathartics be used? In acute inflammatory cases—no; in non-inflammatory cases—yes.

We are never sure in a given case, where vomiting has not developed, that a cathartic will not do some good, and personally we would be willing to try it once anyway. If vomiting has begun, never.

Eserine salicylate hypodermically can always be tried for several doses. Morphine is indicated for pain and shock. Enemas are always indicated.

Enterostomy was advised and practised by Nelaton 1840, and Littre did colostomy for cancer in 1710. These methods will certainly lower our mortality in severe cases, seen late, where a causative operation would be fatal. It takes off the pressure, gets rid of the putrid contents, and the secondary operation is usually well tolerated.

The technique published by Whitacre is very excellent and has saved many lives. Self-retaining rubber catheter may be used as an intestinal drainage. The operations of Bodine are advised for colostomy.

Border-line post-operative cases without all four cardinal symptoms give most trouble, but should be treated with enterostomy before case gets in serious condition.

Moynihan says mortality is 50 per cent., but all over 10 per cent. is due to delay in surgical work.

Statistics from Cincinnati Hospital gives 1 death in 312, due to obstruction, from 1867 to 1907.

Conclusions—All cases seen late should have

two stage operation, Enterostomy or colostomy, simply done under local anesthetic, will greatly reduce mortality. Relief of distention and drainage is the all essential feature in the absence of gangrene.

## Clinical Reports.

### A CASE OF TOTAL ANURIA FOR TWENTY-THREE DAYS, FOLLOWED BY A PERFECT RECOVERY.

By Wm. D. Miningham, M. D.  
Newark, N. J.

Complete suppression of urine for a period of twenty-three days, followed by a perfect recovery seems incredible, nevertheless such is the case with a very remarkable patient whom Dr. Edward J. Ill, of Newark, operated upon recently.

The patient in question was possessed of only one kidney, a fact which stamps the case as a most unique one. The history is as follows: Mrs. M. C., age 34, housekeeper, mother of three children. Two years ago gave birth to an eight months' child. A few days later had a severe chill, followed by a rapid rise of temperature, reaching 106 F., severe pain in the right lumbar region and headache. Complete suppression of urine set in and in spite of heroic measures, persisted for three days. When the urinary flow was re-established, it was found to contain a large amount of albumen. At this time the patient was under the care of Dr. E. B. Witte, of Trenton, N. J.

Convalescence was tedious and she enjoyed fairly good health until fourteen months later, while visiting in New Bedford, Conn. At this time she was suddenly seized with another attack of pain in the right kidney region which was accompanied by total anuria for eleven days. During this illness she was attended by Dr. W. F. Potter and Dr. Webber, of New Bedford. The diagnosis was a probable renal calculus. On the twelfth day a large quantity of pus-laden urine was suddenly passed with much relief. From this time on urine was voided in increasing amounts, gradually becoming clearer until it was practically free from pus. Convalescence was again slow and within six weeks the patient was able to perform light household duties again.

On September 23rd the last attack set in abruptly with excruciating pain in the same region and complete suppression of

urine for twenty-three days. During this period the patient vomited frequently and complained of occasional headaches, which were at no time severe. Consciousness was retained throughout and there were no convulsions. The condition was unlike that of ordinary uremia.

The temperature varied between the normal and 100.5 F. Owing to the irritability of the stomach, enemata were resorted to and given almost entirely. During this attack she was in charge of Dr. Wm. R. Ward, of Newark, a very careful and keen observer, who spent much of his time with the patient and had her watched closely during his absence to eliminate any possibility of deception. Frequent catheterization met with uniformly negative results.

On the twenty-first day after suppression had set in she was seen by Dr. Edward J. Ill, who naturally was very reluctant to accept such an unusual history, but was assured, however, by Dr. Ward that the history as given was true in every particular. An examination revealed the absence of the left kidney and a very much enlarged and fluctuating right kidney.

The diagnosis made was pyonephrosis with an obstructing calculus. The patient was removed to St. Barnabas' Hospital and kept under close observation for thirty-six hours. The catheter was passed several times during this period and the bladder was found empty in each instance. The necessity of an immediate operation was then emphasized and, fortunately, was readily consented to.

An incision was made in the right lumbar region beginning at a point below the last rib and outer edge of the erector spinae muscle, running downward and forward toward the iliac crest. From the pelvis of the kidney about 500 c.c. of thick foul smelling pus was evacuated which was under great tension. Four phosphatic calculi were also removed, three of these were taken from the renal calyces, while the fourth was lodged firmly in the ureter and extracted only with considerable difficulty through the upper ureteral orifice without injuring the ureter. Drainage was provided for by means of a "horse-shoe" drainage tube and gauze. Three of the calculi were almond shaped but larger, the fourth was triangular in shape. The bacteriological findings showed large numbers of colon bacilli in the pus.

Improvement set in rapidly and continued uninterruptedly.

For the first day drainage was very profuse, but there was no evidence of any urine. On the second day drainage was less profuse and about a half ounce of bloody fluid was obtained by catheter. On the third day the discharge from wound had a decided urinous odor. Fourth day—voided frequently in amounts of from one to four ounces, passed 29 ounces in all for the 24 hours. From this time on increasing quantities were voided daily. Beginning with the tenth day the daily output varied between 40 and 50 ounces.

Patient was discharged well on the twenty-ninth day.

For obvious reasons the literature on anuria is very scant. When suppression continues for more than a few days, the outlook is uniformly bad.

Polk's case lived eleven days after the only kidney was removed.

Charcot reported a case of eleven days standing.

Adams writes of a case of nineteen days duration.

Fowler in his treatise on anuria records cases of the following periods—eleven days; two cases thirteen days each; two cases of fifteen days each; eighteen days; twenty-one days; and twenty-eight days. All of these cases died, except one case of thirteen days, which recovered.

Scott and Schroff reported a case of recovery after nine days.

Whitelaw<sup>1</sup> reports a case thirteen days standing following an attack of scarlet fever.

Bryce<sup>2</sup> records a case lasting seventeen days.

Butler<sup>3</sup> mentions a case with a single kidney in which suppression persisted for thirteen days, due to an inspissated thrombus.

Dubuc<sup>4</sup> tells of a case which continued seventeen days before death ensued.

Fontaine<sup>5</sup> reports a case of twenty-five days standing.

Nunnely<sup>6</sup> exhibited the kidneys of a woman who suffered from anuria for twelve days.

This paper would not be complete without mentioning a few of the cases the older writers had to contend with and which they have so generously left records of. Verily, they might have said with Ambrose Pare, that posterity promised nothing new for them in this respect. The



following cases will be found amusing at least, if not interesting.

Haller<sup>7</sup> mentions a case lasting twenty-two weeks.

Domonceau<sup>8</sup> recorded a case of six months duration; likewise Marcellus<sup>9</sup> reported another six months.

Lemery<sup>10</sup> describes the case of a monk who for eight years vomited periodically instead of urinating in the usual way. Five hours before vomiting he experienced severe pain in the kidneys. The vomitus had a urinous odor and was of a dark red color. He drank a great deal of wine and ate but little. He claimed that he always welcomed vomiting and suffered more when it did not occur.

Peebles<sup>11</sup> writes of a case which had suppression more than once for five weeks.

In conclusion I wish to thank Dr. Ill for permission to publish this case, and also Doctors Gould and Pyle for the references I have taken from their most excellent works.

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#### CASE OF APPENDICITIS IN AN INFANT 7 MONTHS OF AGE.

Reported by R. B. Gibb, M. D., Kansas, and published in the Journal of the Kansas Medical Society, March, 1909.

The patient was the 6½ months old daughter of Mr. and Mrs. H. of this city, and underwent an operation on the 27th day of July, 1908, for appendicitis. The infant was artificially fed and consequently had suffered from some form of gastro intestinal trouble, practically since birth. The cardinal symptoms found were vomiting, colicky pain and temperature, and at times it became absolutely necessary to administer some pain relieving menstuum.

At the age of six weeks, in going back over the case, the little one had some acute gastro-intestinal trouble, manifesting symptoms of pain, vomiting, etc.; much difficulty was experienced in securing a bowel evacuation; frequent enemas with the usual medication, secured but little result. The trouble subsequently subsided, but seemed to be the beginning of the infants' disturbance which followed. Efforts were made at diet, all of the prepared foods, includ-

ing barley, rice water, albumen water, beef juices, and whey being given from time to time, with the usual routine medication, giving but little benefit.

As the case presented itself to me, it seemed to be purely a condition induced by improper feeding, viz.; the colicky baby. On the 24th day of July, I was called to prescribe through the phone. Gave galactose followed by oil. advised restricted diet and enemas. On the day following I investigated further and found the bowels had not moved, considerable vomiting, much colicky pain, temperature 103° per rectum, following a rigor. The entire abdomen apparently very tender but impossible to localize pain.

The little one, after the onset, had regular rigors, having from two to five in twenty-four hours, temperature ranging from 101° to 105°. Succeeded in getting the bowels to move satisfactorily, withheld all food, gave quinine internally and thorough inunction as a therapeutic test. Was compelled to give an opiate at least every two, to three, hours, for pain. Secured much more relief from chloranodyne than from other pain relieving drugs. Drs. Moberg, Bogle, Sloane and Dr. Gale of Girard, saw the case with me, on the 25th inst. We partially narcotized the patient through the administration of about one fiftieth grain of morphia sulph., hypodermatically, and were then able to palpate the abdomen thoroughly, and though narcotized, palpation in the region of the appendix manifested decided pain symptoms. A diagnosis of suppurative appendicitis was made, operative procedure decided upon as the most rational treatment.

The patient was removed to the Mt. Carmel Hospital, an anesthetic was administered and with the assistance of the consulting doctors on the case, the abdomen was opened. Palpation under the anesthetic did not reveal any localization. The gridiron incision was made at McBurney's point, the appendix palpated and removed. The ileum and caecum were found injected and considerably distended with gas. The serous coat of the appendix, engorged and thickened, considerable lymph free in the peritoneal cavity. There was also a decided deformity of the appendix, a jack-knife angle, so to speak, apparently produced by adhesions and tractions from the meso-appendix; the wound was closed without drainage. There were about two minims of pus in the distal end of the appendix beyond the constriction produced by the traction from the meso-appendix.

The patient made an immediate recovery, not the least shock, and all symptoms subsided at once. A blood count would have been an advantage. A leucocytosis of 20,000, indicating suppuration. In summing up the case, my opinion is that the patient had a light attack of appendicitis, or trouble arising from the deformity until the acute attack prior to the operation.

#### CARCINOMA OF THE TONSIL.

Dr. Albert A. Berg presented this case, at the December 4th meeting of the New York Academy of Medicine. The patient was a Hungarian, who gave a history, showing that during the past year he had had trouble with his throat, and during the last few months he had devel-

oped a large tumor mass and swellings in the neck, and characteristic radiating pains and difficulty in swallowing. There was not much difficulty in breathing. An examination revealed a large mass of adherent glands in the submaxillary and occipital triangles. Examination by mouth showed a large fixed tumor which corresponded to the right tonsil. This was found to be an ulcerating carcinoma. After temporarily ligating the common carotid artery on the right side, an incision was made which extended upward to the angle of the mouth, the jaw was sawn through in an oblique direction, the mucous membrane of the mouth was divided, and the tonsil and surrounding tissues excised. There was practically no bleeding. An uninterrupted convalescence took place. There was at present a small fistula resulting from a piece of necrosed bone.

### **TUBERCULAR OBSTRUCTION OF THE BOWELS.**

Reported by Dr. J. R. Wellington, Washington, D. C., in Washington Medical Annals, January, 1909.

Anita B., white, age 10, first entered Children's Hospital, March 9, 1908, for removal of tubercular glands of the neck. She was from Virginia, but came to the hospital from one of the city orphan asylums, where nothing of her previous history was known. In the middle line of the abdomen were two scars of previous laparotomies, each five or six inches long, one above and one below the umbilicus. She had no recollection of having been operated upon and nothing could be learned as to the reasons of these operations. It was thought probable that they had been for tubercular peritonitis, which afterwards was found to be true. The cervical glands were removed and she left the hospital June 12.

July 31 she was readmitted with a history that ten days previously she had had a chill, vomited and had considerable fever. At the same time she had a marked pain in abdomen, and it was with great difficulty that a movement of the bowels was obtained. Two days before admission she had a similar attack with persistent vomiting and constipation. Yesterday she had several movements after taking one ounce of castor oil.

She was admitted to the service of Dr. Frank Leech. She was fairly well nourished and had apparently lost no flesh since her previous residence in the hospital. There was no evidence of disease of the lungs or joints. The abdomen was somewhat distended, and over the region of the appendix a hard mass about the size of a small orange could be felt. The temperature was normal and the pulse from 80 to 120. The bowels were moved by means of castor oil. The urine was negative. She was free from pain; nor did she vomit after admission.

I was asked by Dr. Leech to see her with him, and we concluded from the history of the two attacks already mentioned and from the presence of the tumor that she was suffering from chronic intestinal obstruction due to some tumor in the region of the ileo-caecal valve, and an exploratory operation was decided upon August 4. An incision was made over the tumor. The abdominal contents seemed normal

except that the appendix and ileo-caecal valve were involved in a hard nodular mass about the size of a hen's egg. No enlarged glands were discernible except two or three in the immediate neighborhood of the tumor. The ileum above was considerably distended, while the caecum was collapsed. Not knowing at that time that the previous abdominal trouble had been tubercular, I was uncertain as to whether the growth was tubercular or sarcomatous.

A resection was decided upon, and this was done, keeping well away from the diseased into healthy bowel, followed by an anastomosis, and the abdomen was closed without drainage. At the close of the operation the pulse became very weak, and she was given salt solution under the skin before leaving the table. During the next two or three days her condition was rather critical. Salt solution was given continuously per rectum by the drop method and as much as 5½ pints in 24 hours were retained. On the fourth day, there being considerable distention, a turpentine enema was given, which brought away some fecal matter and much gas. On the fifth day nourishment by mouth was begun and the salt solution discontinued. There was a slight fecal discharge from the wound, which lasted for only a few days, and from that time her convalescence was uninterrupted. At present she has gained in weight and color, her bowels move regularly and she seems absolutely well, except for a small superficial ulcer of the skin at the site of the incision.

Dr. W. W. Wilkinson kindly examined the specimen and made the following report: Intestine: All the coats are much thickened; considerable hyperplasia of connective tissue elements; areas of diffuse round cell proliferation; and tubercles. No distinct giant cells seen. Mesenteric Glands: These are caseous and typical of a tubercular process. Diagnosis: Hyperplastic tuberculosis of intestines.

### **OTITIC BRAIN ABSCESS OPERATED ON THIRTEEN YEARS AGO.**

Dr. Gorham Bacon, at the meeting of the New York Neurological Society, held Dec. 1, 1908, presented this patient, a man of forty, who was operated on by Dr. Bacon thirteen years ago for a temporosphenoidal abscess of the left side. At that time he gave a history of chronic otorrhea of sixteen years' standing. Four days prior to coming under Dr. Bacon's observation he complained of a severe pain in the left ear, with profuse discharge, and it was said that during this time he acted rather queerly. On December 5, 1895 (four days after the onset of his pain), he had a general convulsion lasting twenty minutes, with loss of consciousness, violent twitching, and frothing at the mouth. Prior to this he had never had any convulsive seizures. The patient was removed to the New York Eye and Ear Infirmary and was operated on first for mastoid trouble. Within forty-eight hours he developed an amnesic aphasia which was quite marked. On the ninth day after the operation he had a severe chill during the night, with profuse perspiration and severe headache. His symptoms at this time were very suggestive of sinus thrombosis. The skull was thereupon opened in the left temporal region and an ounce and a half of pus was evacuated from an ab-



secess in the temporosphenoidal lobe. Shortly after the operation he had several convulsive attacks. His aphasia gradually improved, and on January 2, 1896, had entirely disappeared. During the thirteen years that had elapsed since the operation, this patient had had twenty-two convulsive attacks. The last one, which occurred in April, 1906, as well as the one occurring two weeks prior to that time, were very mild. The attacks were occurring at gradually increasing intervals, and were apt to come on after severe fatigue. The patient had been taking bromides irregularly.—Reported in the Medical Record.

#### **PYOSALPINX, FIRMLY ADHERENT TO THE ANTERIOR WALL OF THE BROAD LIGAMENT AND UTERUS.**

By Dr. H. Grad, at the Meeting of the New York Obstetrical Society, January 12, 1909, as Reported in *The American Journal of Obstetrics*, March, 1909.

Pus collections in the pelvis anterior to the broad ligaments and uterus are comparatively rare and are of interest. In puerperal infection pus collections are more frequently encountered in this part of the pelvis, but not so frequently in the non-puerperal infections. In the case under consideration a pus tube, with a caliber fully that of a small intestine, was lying in front of the right broad ligament, firmly adherent. The right ovary was situated normally behind the broad ligament.

The history of the case is as follows:

Mrs. F., aged twenty-eight, was first seen on January 4, 1909. About three weeks ago the patient was taken with abdominal pain, which after a few days became localized in the right side. During this attack she had chills and fever, headache and great prostration. She had been married nine years but never had been pregnant. Her menstruations have always been regular. A year and a half ago she had a similar attack of abdominal pain and had to be taken to a hospital where an abscess was opened through the vagina. She remained in the hospital for over six weeks but made a complete recovery.

Abdominal palpation revealed a very tender lower abdominal region particularly over the right lower quadrant. Bimanually a very tender mass was palpable in front of the uterus extending transversely across the pelvis. The culdesac was free. Pulse 100, temperature 100° F. She was referred to the hospital for operation, and on January 8 the abdomen opened in the median line. The pelvis was plastered over firmly with an inflammatory mass, consisting of omentum, and several coils of intestines. After protecting the abdominal cavity with pads as well as possible, the omentum instead of being separated from its adherent position was tied off with ligatures close to the abscess wall and with an aspiration needle the pus was drawn off. After liberating the coils of intestines it was found that the pus tube was lying in front of the broad ligament. It was removed in the usual way. The abdomen was closed in layers except that a small rubber tube was placed in front of the uterus and brought

out at the lower angle of the wound. The interesting question is how did this Fallopian tube get into this abnormal position? Did the displacement occur before or after the infection? I have seen the Fallopian tube adherent to the round ligament in several instances. In the case under consideration the patient had a posterior section done a year and a half ago. It is possible that at that time the inflamed tube was displaced by the gauze packing. I should like to hear the opinions of the members of the society on this question of displaced pus tubes.

#### **RUPTURED GALL BLADDER WITH UNHEALED CHANNEL OF ESCAPE OPENING BELOW POUPART'S LIGAMENTS.**

Presented at the Jefferson County (Ky.) Medical Society, by Dr. Irvin Abell, of Louisville, and reported in the *Kentucky Medical Journal*, March, 1909.

This patient is exhibited to you this evening on account of the pathological curiosity which he presented at the time of operation. Similar cases of rupture or perforation of the gall-bladder with formation of fistulae have been repeatedly described, the fistulae most frequently opening into viscera adjacent to the bile passages; Courvoisier and Naunyn tabulated 384 cases, the fistulae opening into the stomach, various portions of the intestine, the urinary tract, retroperitoneal tissues, thoracic organs, and upon the skin of the abdominal wall. In this instance the fistulae opened upon the surface of the thigh, below Poupart's ligament at the junction of its middle and outer third. The patient, J. D., is 23 years of age, and with the exception of the diseases of childhood was healthy and well until three years ago when he suffered an attack of appendicitis; a second one followed a year later, and last October, one year ago, Dr. W. O. Roberts removed his appendix following a third attack. From this time he had no further abdominal pain or disturbance until last July one year ago, when whilst walking through the woods he stepped into an unseen hole and fell; he immediately suffered great pain in the right side of the abdomen and was confined to bed for three weeks, during which time his temperature ranged from 101 to 103 and there gradually appeared an enlargement in the painful area; at the end of the third week this had pointed below Poupart's ligament and was opened by his physician, discharging over one pint of pus; the latter presented nothing unusual in color, consistence or character. The pus was discharged freely at first, scantily later, but has been uninterrupted until he came under observation with the exception of a few days during which time there was a collection of wound secretion in the abscess cavity. At the operation the sinus was dilated with the finger, the tip of which barely reached into an abscess cavity within the abdomen; this cavity was opened just internal to and above the anterior superior spine of the ilium, using a grid-iron incision, and was found to be as large as an ordinary orange, reaching up under the costal arch and the ileum and extending inward costal arch and the ilium and extending inwards under the outer border of the rectus muscle; these two stones were found in the cavity, the

smaller one was removed first and not recognizing its character at the time, was crushed in order to facilitate diagnosis; the latter was readily confirmed upon removal of the second stone, which as you will observe, is large and is marked by prominent, multiple facets; upon recognizing the character of the calculi a careful examination of the abscess cavity was made in order to determine, if possible, the condition of the gall-bladder perforation; the cavity apparently was lined throughout with granulations, it being impossible to demonstrate a communication with the gall-bladder. Drainage was made, as you will observe, by means of a rubber tube introduced through the abdominal grid-iron incision. The points to which I would be pleased to have you direct your attention in the discussion, are, (1) the absence of bile in the discharge at any time; (2) the apparent complete closure of the perforation in the gall-bladder; (3) the absence of symptoms in the presence of stones; and (4) the future outcome of the gall-bladder lesion.

### PYELO-LITHOTOMY.

By John McMahon, M. D., San Jose, Cal.

C. H. A., aged 63 years, occupation merchant, weight 150 pounds, prematurely aged, due to a Bohemian life.

Nine years ago began to have attacks of renal colic, with severe pain extending to bladder and right testicle, causing vomiting. About two hours after cessation of these attacks the urine would become bloody and contained a large quantity of pus. These attacks would come on every few days. Cystitis developed and he was unable to retain more than three or four ounces in bladder. Had to rise several times at night to urinate, each time passing about half a cup of "milky urine tinged with blood and accompanied with severe rectal pains." More or less constipated all the time, with appetite capricious. X-ray examination revealed stone in right kidney. Operation: Incision beginning 3 1-4 inches to the right of the median line of the spine, and 1 1-2 inches below the twelfth rib, extending down to one inch above crest of ilium. Length of incision eight inches.

Kidney was brought into lumbar wound, and opened longitudinally, and a stone weighing 423 grains, two inches in length, one inch in diameter was removed. The lower pole of the kidney was distended by a large abscess in which the stone was lodged. The kidney abscess was flushed with normal saline solution, drainage tube inserted into abscess cavity around which sterile gauze was packed, tube removed on fifth day, wound healed by twenty-first day, able to take a ride on twenty-eighth day, complete recovery.

Composition of stone, urate of soda, uric acid and soda phosphate.—Cal. State Journal.

### Restoration of Sight After Nearly a Month's Blindness from Glaucoma,

Dr. J. L. Minor reported the case of a woman 57 years of age whose illness began with a sudden and severe pain in the left eye, lasting thirty-six hours. A few days later a similar attack occurred in the right eye and vision became blurred in both eyes. In due time an iridectomy upward was done in both eyes, they

both having become totally blind, with more or less continuous pain. He detailed at length the treatment. One week after operation she could see the hands of the clock across the room. Five years later she could see fairly well, though there was a permanent lessening in the range of vision.—*A. M. A. Journal*, December 5, 1908.

## Abstracts from Medical Journals

### HOME TREATMENT OF SCARLET FEVER.

On the basis of an experience of many hundred cases of scarlet fever, Milne is satisfied that the method of anointing the patient with 10 per cent. carbolic oil or eucalyptus oil, day by day, and a plentiful supply of fresh air, prevents the disease from spreading. After a few days his patients were allowed to mingle freely with other people. He reports many instances in which this practice has been followed—notably one in which he brought such a patient as a guest into his own home, allowing him to mingle freely with his children at meals and at games—without ill results. Milne now prefers eucalyptus oil which is rubbed in over the entire body from the crown of the head to the soles of the feet, including the roots of the hair, the axillae, and other flexures, both morning and evening for the first four days, then once daily until the tenth day. The throat is swabbed with carbolic oil, 10 per cent. every two hours for the first twenty-four hours. Milne has never known nose, ear or kidney trouble to follow, and the severity of the attack appears to be always mitigated. Cold must be avoided for three weeks and the children warmly clad. At first he allows only soda water or hot water and milk in equal quantities; in a few days, he permits light diet, and by the tenth day, ordinary meals. He has applied this method also in measles. This method, he asserts, dispenses with the need of elaborate disinfection afterward, the course of the disease being destroyed. Of course, it protects only against contact infection, and would not check an epidemic arising from a common source, such as infected milk.—*British Medical Journal*.

### TREATMENT OF LOCOMOTOR ATAXIA.

Dr. A. McL. Hamilton, in the *Journal of the American Medical Association* December 5, 1908, deprecates the general tendency to give an unfavorable prognosis in cases of locomotor ataxia, which has a tendency to send the patients to the pretentious quacks, only, of course, to be disappointed in the end. He recognizes two classes of cases, one including about 60 per cent. of all patients and in which the disease is a parasyphilitic affection, progressive and usually incurable, though subject to favorable modifications and even arrest by intelligent treatment; the other 40 per cent. includes patients who are not only capable of being greatly helped, but often of being cured. Of course, evidences of destructive neural disease is of unfavorable signification. Considering the larger proportion of leutic cases, specific treatment is suggested, and he finds that in about 20 per cent. the use of mercurials is of advantage, especially the bichloride. The treatment of special symptoms is of great importance, and he calls attention to the effect of



barometric conditions on the ataxic pains, which are for this reason often considered rheumatic. If this influence can be determined, the use of the salicylates and hydrotherapy is often of value, and he thinks that, with the judicious control of the physician, the use of morphine is comparatively safe. Dietetic regulation should be instituted for the gastric crises which are often associated with intestinal disturbances and autointoxication. The use of counter-irritation is also mentioned. For the ataxia the Frenkel systematic exercises may do much good in cases in which there is not too much pain, gastric crisis, or excessive friability of the bones. Over-exercise and fatigue, however, should be avoided. When there is plantar anesthesia, perhaps causing the ataxia, he has found surprising benefit from the high-frequency current applied directly to the sole by means of a spark electrode. He has no faith in other forms of electricity for this purpose. For the urinary difficulties occurring in about half the cases, lavage of the bladder at regular intervals, used for a long period, is important. A warm winter climate is useful in tabetic cases, and, preferably, dry climates. Cases due to shock, trauma, or hysteria are often curable by very simple means, if there is no syphilitic basis.

### SERUM DIAGNOSIS OF SYPHILIS.

Dr. W. J. Butler, Chicago, in a paper read at the annual meeting of the Illinois State Medical Society, on "Serum Diagnosis of Syphilis," gives the following conclusions:

The serum reaction for syphilis is specific.

It is found positive in from 90 per cent. to 98 per cent. of all cases with syphilitic manifestations.

It is found positive in 50 per cent. to 60 per cent. of latent cases.

It is found positive in from 70 per cent. to 80 per cent. of meta- and para-syphilitic diseases.

The reaction is in many cases influenced by treatment of the patient and it is not improbable that this number would be greatly increased if the reaction were pursued throughout prolonged treatment. This has recently been confirmed by Lesser, who found that in practically every case treated long enough, the reaction disappeared.

A positive reaction indicates activity of the specific virus, and is an indication for anti-syphilitic treatment.

While a positive reaction indicates syphilis, a negative reaction does not have an equal negative value.

It is diagnostic of a systemic infection, whether acquired or inherited, and not an organ diagnostic measure.

The reaction will be found of enormous advantage in differential diagnosis in every department of medicine, and as an index for treatment.—*Illinois Medical Journal*.

### PAINFUL ISCHEMIA DUE TO AN ARTERIAL OBLITERATION OF SYPHILITIC ORIGIN.

Dr. Feingold, Chicago, in closing a report to the Chicago Medical Society on a case of painful ischemia of the left foot due to obliterative arteritis of syphilitic origin, gives the following points:

1. That it is a disease of adult life and is more common in men than in women.

2. That it is invariably due to a endo-meso and periarteritis of syphilitic origin.

3. That the pain is caused by nerve starvation or nerve hunger.

4. The disease may be very chronic, slowly progressive, or may run a much more rapid course.

5. The ischemia varies in degree with the extent of the vascular obstruction and the efficiency of Nature's means of compensation.

6. If gangrene results it varies in type according to the amount of venous obstructions associated with the arterial obstruction.

7. Fever is usually present when the disease is active.

8. The disease may become arrested and the symptoms gradually pass away as the unaffected vessels become more efficient substitutes for those that have been occluded.—*Illinois Medical Journal*.

### A SAFE METHOD OF OPENING THE ABDOMEN.

The Vienna correspondent of the *Lancet* calls attention to Lihotzky's method of opening the abdomen—the supra-symphiseal transverse section of the fasciae. The incision is from three to four inches long, slightly curved, and extending transversely over the pubes, dividing the skin, subcutaneous tissue, and fasciae. The latter are then detached from their base upward and downward so that the recti and pyramidales muscles are free. The recti muscles are then divided in a longitudinal direction so that they are held only by a thin layer of connective tissue and the transverse fascia and the peritoneum are subsequently incised. This method gives a very ample access to the abdominal and pelvic organs. Tumors reaching up to the umbilicus can be easily removed through the opening. All operations on the uterine adnexa as well as the total extirpation by Wertheim's method and the operative treatment of extrauterine pregnancy can be easily performed. The closure of the wound is effected in the following manner: The peritoneum and the recti muscles are sutured in the longitudinal direction and the fasciae and skin in the transverse direction. The sutured wound is covered with gauze, held down by two strips of adhesive plaster. After eight days the sutures in the skin are removed, after which the patient may be out of bed without any abdominal belt. The cosmetic defect of the scar is soon concealed by the hair growing over it, especially if the incision is not very large, while the transverse scar is not liable to become stretched with formation of ventral hernia. This functional superiority of the horizontal incision over the vertical one has been proved by many hundreds of cases in Germany and also in Austria. The method is also available for a bilateral Bassini operation if the angle of the incision is drawn well to the side by means of a blunt hook.—*The Lancet*.

### ENTEROSTOMY IN INTESTINAL OBSTRUCTION.

Dr. John P. Lord, Omaha, Neb., at the annual meeting of the Western Surg. and Gyn. Ass'n., December 29, 1908: The general mortality after operation for intestinal obstruction is probably from 50 to 80 per cent. According to

Elsberg, in only about 10 or 15 per cent. of cases entering Mount Sinai Hospital, New York, is the condition still to be considered a good one; and 54 died out of 100 patients entering three of the large hospitals in New York during 1906. The extreme conditions commonly met require too much anesthetic, too much surgery and too much time for successful surgical relief by the radical intervention too commonly resorted to. Until earlier diagnoses are made, and more prompt surgical intervention is resorted to, enterostomy by the Senn or Kader principles should be done to drain the toxic contents of the intestine and to stop the absorption of these ptomaines, although an effort should be made to relieve the effects of distention on the intestines, and its hindrance to respiration. It relieves conditions which, if allowed to continue, become rapidly fatal. It meets the indications without necessarily killing those who are extremely ill. It is not a last resort. Done in the modern way, it is not formidable, nor very objectionable, in the face of so serious an affliction. Inanition, formerly feared, skin excoriation, and the necessity for a secondary operation, are all eliminated by the present methods. Liquid nourishment, stimulants and cathartics may be administered with valuable results. Irrigation and drainage and the use of the Moynihan tube may also be accomplished before the wound is closed, and may also be used to a limited extent afterward. The necessity for a radical secondary operation is sometimes obviated by this "tide-over" procedure, because of the subsidence of peritonitis, the consequent infiltration, the paralysis, and even the angulation which was due to overdistention; the improved results from this procedure justify its more extended use. It is not so formidable as to preclude its use by general practitioners, who have had hospital training and possess surgical instincts. The coming generation of physicians can be more depended on to make earlier diagnoses and to possess the skill to relieve most surgical emergencies. The mortality from intestinal obstruction is, therefore, to be lowered in the near future.

#### OBSTETRIC OPERATIONS IN DYSTOCIA FROM DEFORMITIES OF THE PELVIS.

From the *American Journal of Obstetrics*,  
March, 1909.

Pinard (Bull. Med., Nov., Nov. 18, 1908) gives the results of his experience of eighteen years at the Baudelocque in regard to pelvic operations for deformities. Never interrupt a pregnancy, whatever be the degree of deformity; never use forceps or version during labor in such a case, thus causing a struggle between the resistance of the osseous basin and the fetal head. Obstetric operations in such cases should be the conservative Cesarean section, increase the size of the pelvic ring by symphysectomy, pubiotomy, or ischio-pubiotomy, or utero-ovarian amputation. In these rules he considers only cases in which the child is living; when it is dead all sorts of procedures to diminish the size of the fetus are in order. No force should ever be applied to a pregnant woman when she has a deformed pelvis, and induction of abortion and premature labor are likewise forbidden. From 1890 to 1908 there

have been at the Baudelocque 46,249 confinements; among these there were 141 symphysectomies, twenty-two Porro operations, and thirty conservative Cesarean sections. In symphysectomy the pelvis is widened without danger not only temporarily, but permanently. Some of these women are delivered spontaneously in the next confinement of larger children. But this operation can only be done under certain conditions: dilatation of the cervix must be complete, otherwise the length of dilatation after operation will expose both mother and child to dangers. The vitality of the child is lessened and the mother is exposed to danger of infection. But even under these conditions the child has often to be extracted, spontaneous rapid expulsion being the exception. The soft part may always be injured in efforts at extraction. If the woman is a multipara the obstacle to dilatation of the soft parts is less; in the primipara it is much greater and serious lesions of the perineum and vagina may take place. The ideal field for symphysectomy may be thus defined: complete dilatation in a healthy multipara. The conservative Cesarean section is so easy of execution that it may be performed by any practitioner in any place, provided that asepsis is carried out. The indications for the operation are extreme deformity of the pelvis, and some cases in which the pelvis is below this limit. No intervention should be made until labor has commenced. When we have a limited pelvic diameter, with a labor that has continued for a long time, dilatation being incomplete, and the child and mother both in danger, the operation is justifiable. During the last four months twelve Cesarean operations have been done by the author. All the women recovered perfectly and all the children were born alive, and all but one syphilitic child are still living. Whenever there are symptoms of infection a utero-ovarian amputation should be done. In osteomalacia castration is demanded.

#### PROGRESS OF LABOR IN CONTRACTED PELVIS.

From the *American Journal of Obstetrics*,  
March, 1909.

R. Labusquiere (Ann. de Gyn. et d'Obst., Nov., 1908), gives the results of labor in 885 cases of contracted pelvis delivered at the clinic of Chrobak, in the Vienna Hospital. All osteomalacic pelvis were excluded from the list. The cases were classified into simple flat pelvis, flat rachitic pelvis, generally contracted pelvis, and generally contracted rachitic pelvis. Of the 885 cases labor terminated spontaneously in 641 cases, that is 72.42 per cent. The infantile mortality was 2.14 per cent. Maternal mortality was 0.11 per cent. The rule of the clinic is to await spontaneous delivery as long as possible. Twenty-seven infants were born dead, showing a certain danger to the child from this operation. Prophylactic version was done in twenty-five cases; the author believes that this operation is indicated only in great degrees of contraction and is not justified in slight degrees. But in general practice this operation must be done in cases which in a hospital might be delivered by Cesarean section or operation to widen the pelvis. In considerable de-



grees of stenosis, especially in the generally contracted rachitic pelvis, the combination of prophylactic version with premature labor will give living children. Forceps were applied twenty-nine times to complete the delivery. There were no bad results for the mother, but the child died in 17.2 per cent. of the cases. Forceps should be used only in the interest of the child or the mother, but when the indication is clear they should be applied without hesitation. High forceps is a severe operation in contracted pelvis for both mother and child, but less so than operations for widening the pelvis. The external orifice must be dilated or dilatable, the distention of the lower segment of the uterus not too great, the disproportion between head and pelvis not too great, and the pelvis should be able to resist energetic traction. Craniotomy is for children dead or dying. It was necessary eighteen times. Premature labor is justified in multiparae with a conjugate of 7 to 8.5 centimeters, when previous labors have shown the impossibility of spontaneous delivery. The best time is the end of the ninth lunar month. Cesarean section is applicable with a conjugate of from 6.5 to 8 centimeters. There were thirty-one sections done in the clinic with a maternal mortality of 3.2 per cent.

## Daily Press and Magazine Items

### Dr. Deaver Forgiven by Friends He Had Cut.

(From the *North American*, Philadelphia, February 16, 1907.)

Dr. John Deaver, eminent surgeon, chief of the German Hospital surgical department, and recognized authority upon appendicitis, was the guest of honor last night at a dinner the like of which has never before been held in this city or elsewhere, so far as is generally known.

Prominent doctors, whom he has separated from their appendices or on whom he has otherwise operated, were the hosts, and, as one, remarked, "they were nearly all there."

The dinner took place in the large banquet hall on the third floor of the University Club house, in Walnut street, and there were present, in addition to Dr. Deaver, 113 physicians, each of whom had at some time submitted to an operation at the hands of the guest of honor for appendicitis or some other disease which required a major operation.

To preserve the perfect harmony of the occasion the fifteen waiters who served the diners, had been recruited from the ranks of Dr. Deaver's patients, and each waiter had been operated upon by him.

There were but two circumstances which pointed in any way toward the character of the dinner. The waiters were dressed as Red Cross orderlies, and the punch was served in manikins, each of which had a miniature knife stuck in it at the exact spot where the incision is made in the operation for appendicitis.

A majority of the guests are residents of Pennsylvania, but many of them came from a great distance to pay homage to a great physician. There were representatives from South Carolina, Florida, Iowa, Massachusetts, Ohio,

Washington, Alabama, New York, New Jersey and Missouri.

The event had been widely heralded and there had been much speculation as to what its characteristics would be. Aside from the garb of the waiters and the suggestive manikins, the chief feature of the decorations was a profusion of pink carnations, which are Dr. Deaver's favorite flowers.

The banquet hall was decorated with flowers and tropical ferns and plants. A long table ranged the length of the room, and from it extended five smaller tables at regular intervals.

The seating arrangements were such that each man was enabled to face the guest of honor.

Except for the manikins, no trophies of the operating table were in evidence, and only the presence of the waiters served as a reminder that it was a dinner tendered to a surgeon by men whose lives he had saved.

The dinner began at 6.30 o'clock, and at the conclusion the following toasts were responded to:

Deaver—The Anatomist and Teacher of Anatomy, by Dr. John C. Heisler, professor of anatomy at the Medico-Chirurgical Hospital. Deaver—The Surgeon and Teacher of Surgery, by Dr. Richard Norris, assistant professor of obstetrics at the University of Pennsylvania. Deaver—The Man, by Dr. Joseph S. Neff, director of Public Health and Charities.

At the conclusion of the toasts Dr. William E. Hughes presented Dr. Deaver, upon behalf of the guests, with a loving cup suitably engraved.

All of the set speeches dealt with the work of Dr. Deaver, and were so arranged as to tell the story of his career.

Dr. Henry W. Stelwagon, who was chairman of the committee, acted as toastmaster.

The committee on arrangements consisted of Dr. Henry W. Stelwagon, Dr. Thomas C. Ely, Dr. Francis M. Perkins, Dr. George M. Ross, Dr. B. Franklin Stahl and Dr. William S. Wadsworth, all of Philadelphia.

When the dinner was originally planned it was proposed to limit the invitations to physicians who had been operated upon by Dr. Deaver for appendicitis, but when it became known that such an event had been proposed, physicians who had personally tested the noted surgeon's skill in other major operations wanted to become eligible.

Then it was decided to invite all physicians who had submitted to major operations at the hands of Dr. Deaver to be present. All who attended the affair knew Dr. Deaver, of course, but very few were acquainted with the other guests, and the early part of the evening was devoted to introductions.

### VIVISECTION.

(From *Collier's Weekly*, January 23, 1909.)

Literary reference or allusion makes readable sometimes the barer facts of science. The vogue of Rudyard Kipling will render more popular a scientific cause to which he happens to lend his name. It is for that reason, rather than for the value of his statement, that we quote the poet as follows on a question of the day:

"The doctor is exposed to the criticism of persons who consider their own undisciplined

emotions more important than mankind's most bitter agonies; who would cripple and limit research for fear research might be accompanied by a little pain and suffering. But if the doctor has the time to study the history of his own profession he will find that such persons have always been against him—ever since the Egyptians erected statues to cats and dogs on the banks of the Nile."

The opponents of vivisection ought to oppose murder, and, therefore, to be vegetarians. They should also object to forced labor and, therefore, never ride behind a horse. They should in sound logic oppose larceny and not drink milk. They should never allow an animal to be punished in process of being trained. In scientific experiment few animals are taken, compared to those killed for food or kept at forced labor all their lives. Most of them are unconscious. The question of when to use anaesthetics must be left to science, since in a small but important fraction of the work drugs must be dispensed with; and it would be fatal to have ignorant outsiders concerned in so critical a decision. Such outsiders are capable of judging sanely neither about the amount of pain involved nor the importance of the knowledge to be obtained. Says President Eliot, of Harvard University:

"The humanity which would prevent human suffering is a deeper and truer humanity than the humanity which would save pain or death to animals."

Moreover, the experiments give knowledge which saves pain not only to millions of human beings, but in many cases to animals themselves. In tuberculosis, for instance, the men of science are fighting for cattle as well as for men; in lockjaw, for horses as well as for our own kind. The marvelous results in diphtheria have happily now become known to almost every mother. To stop animal experimentation would check the advance of surgery. It would take away our strongest weapon in the promising fight being waged against cerebrospinal meningitis, bubonic plague, dysentery and malaria. It would reduce us to despair in the harder but still hopeful contest with cancer.

### Science and Folly.

(From *Collier's Weekly*, March 13, 1909.)

Antivivisection bills are most dangerous when they assume the mask of moderation. There is now before the Legislature of New York a licensing bill which carries peril just in proportion as it appeals to the uninformed and easy sentiments. Under a licensing system the tendency will be to restrict animal experimentation to such persons as, according to the antivivisectionists, are alone entitled to employ it: namely, physicians who have been specially trained in physiology, pathology, and surgery. A mere chemist, such as Pasteur was, and a mere country practitioner of medicine, such as Robert Koch was, would surely not be accorded a license. Let us see how this license system works in practice. Dr. T. Lauder Brunton, one of the leading English physiologists and pharmacologists, wrote to Professor Welch of the Johns Hopkins University:

"Shortly after the antivivisection act was brought into force in England, Sir Joseph Fayrer and I were prevented from carrying on, at

our own expense, experiments on the action of snake poison and the best way of preventing death from it. . . . But at the very moment that we were prevented from doing the experiments here, the Government of India, knowing the importance of the research, as twenty thousand people die yearly from the bite of poisonous snakes in India, appointed their own officials, paying them salaries and providing them with all facilities to carry on the research in India which the Government at home was preventing Sir Joseph Fayrer and me from doing at our own expense."

Sir John Fayrer is one of the authorities of the world on poisonous snakes. A French pathologist, Professor Calmette of the Pasteur Institute, later perfected his antivenin (an antitoxin for cobra and other snake poisons), which is now used with great benefit by the population of India exposed to the bites of poisonous snakes. Another light on what is meant by license is thrown by these words of Lord Lister:

"My own first investigations of any importance were a study of the process of inflammation in the transparent web of the frog's foot. I was then a young, unknown practitioner, and if the present law had been in existence, it might have been difficult for me to obtain the requisite licenses; and even if I had got them, it would have been impossible for me to have gone to a public laboratory to work. Yet without these early researches, which the existing law would have prevented, I could not have found my way among the perplexing difficulties which beset me in developing the antiseptic system of treatment in surgery."

The battle is one between men like Lister—lined up solid—and the cheap hysterics of ignorance, battling enthusiastically in defense of its shallow and blind emotions.

Another aspect of the licensing question has very serious import. It is the intention of the bills to license not only "persons" who perform experiments on animals, but also "places in which experiments are performed. To realize how great is the harm which such a measure as this, if enacted into law, might work, one has merely to think of what has happened in the past in great disease plagues. Texas fever in cattle, a disease of large economic importance, was worked out—its cause and mode of prevention ascertained—in this country in the territory (perhaps covering a thousand miles) in which the disease is endemic. Rinderpest (luckily still absent from this country, but present in the Philippine Islands, and a most destructive disease to cattle) is being worked out successfully over hundreds of miles of territory in which it prevails. The same is true with tuberculosis among milch herds in this and other countries. In India, where many more than five million persons have succumbed in less than ten years to the bubonic plague, the field-work just carried out in the infected villages has brought a solution of the manner in which the infection is carried. A national commission in 1900 investigated bubonic plague in San Francisco. There was great opposition to the investigation by the State Government, which refused to the commission permission to use the laboratories of the State University for its studies. It is not likely that under these conditions the State officials would have granted a license to make ani-



mal experiments to ascertain whether or not the commission was dealing with plague germs—which was the essential point of the inquiry—and for the decision of which the inoculation of rats or guinea-pigs was necessary. The present laws are at least stringent enough. Two young men have recently been convicted in the city of New York for vivisection which did not comply with existing law. Dr. J. G. Curtis has well pointed out the absurdity and the danger in the collective clauses relating to anesthesia, in the clause relating to teaching, and in that clause relating to purposes for which experimentation may be done—a tissue of solemn folly, raising questions which could be settled only in a court of law. There is no instance before the public to-day in which the conflict is more unmistakably between knowledge on the one hand and ignorance on the other.

### Anti-Vivisection Bill in Pennsylvania.

From the *North American*, Philadelphia, March 3, 1909.

Eminent Philadelphia surgeons defended surgical experimentation upon live animals last night as essential to their scientific progress, and asserted that it has been a life-saver. They addressed the House Committee on health and sanitation, protesting against any legal restriction of vivisection.

Before they had their opportunity, however, they heard their experiments denounced variously as "brutality commercialized," "savage brutality," "evidence of hardness of heart," "barbarism" and "scientific degeneracy."

Their accuser was a woman, Mrs. Mary E. Hedden, of West Philadelphia, and in her plea against vivisection she frequently shot defiant glances toward Dr. W. W. Keen, who sat not eight feet in front of her; at Dr. Joseph McFarland, who handled the case for the surgeons; Dr. H. A. Hare and a score of others.

After touching upon the cruelty of operations upon living animals, Mrs. Hedden intimated that the surgeons were too ready to boom the commercial trade in serum.

Dr. Keen was the first to defend vivisection. "If this bill should pass the Legislature," he began, referring to a restrictive measure. "surgeons would hesitate to operate upon you or anybody else. It would absolutely hamper progress. All our absolute facts come out of animal experimentation."

Dr. Hare recited a story of a dying child whose mother pleaded with him to save her daughter. "I desire to say that if a body of medical men had come to me at that instant and told me that I could save that child by doing so, I would have gone into the street and shot everything in sight that wasn't human. I'd have done it, and so would you." In this, he justified vivisection to save human life.

The cruelty of vivisection, according to Dr. George D. Wagoner, president of the State Medical Society, is not to be compared in extent to the cruelty practiced to supply women with feathers and furs. Dr. S. H. Gilliland, of Marietta said that animal experimentation had been a benefit to animals as well as to mankind.

Other phases of the question were discussed

by Dr. John Tuller, Dr. H. H. Donaldson and Dr. David L. Edsall, all of Philadelphia. Dr. Edsall denied all the allegations of the opponents, saying that investigation had been made showing that no wanton cruelty was practiced and that anesthetics were given.

### Medical School Agree on One State Examination Board.

From the *North American*, March 2, 1909.

Harrisburg, Pa., March 2.—Physicians of the allopathic, homeopathic and eclectic schools, who have stood apart for several years on the subject of State control of the medical profession, came together this evening in agreement for the passage by the Legislature of a "one-board" State examining bill.

They arrived at terms at a conference that followed a hearing before the Senate public health and sanitation committee on the Herbst bill, a measure drawn in accordance with the ideas of the allopathic physicians for a consolidated board of medical examiners. At the hearing the "old school" doctors admitted that their bill was not acceptable, in the form presented, to the practitioners of the other schools, but they argued for it as it stood.

There was an adjournment of the hearing, with the understanding that further efforts would be made to get conflicting parties together within the next two weeks.

Action was prompt, for at the conference held almost immediately afterward with the members of the present separate allopathic, homeopathic and eclectic examining boards in attendance to represent their various schools, a compromise measure, with the Herbst bill at a basis, was devised and ratified.

This modified Herbst bill provides for a consolidated examining board, to consist of the superintendent of public instruction and eight physicians of experience and standing, appointed by the Governor. It is specified that three of the examiners shall be of the allopathic school, three of the homeopathic and two of the eclectic. In the original bill no fixed allotment of representatives of the different bodies was provided.

The eclectics stood out for a time for equal representation on the board with the members of the other schools, but they were outvoted by a combination of the allopathic and homeopathic people. Finally they agreed to accept the two places offered.

Osteopathic practitioners receive State recognition by the bill now to be pushed along by the new allies, but are to have no representation on the examining board. Their bill to establish a separate board of their own, over which there has been lively contention in three Legislatures, has been halted at the final passage stage in the Senate. The backers of the consolidated board say that that measure takes care of the osteopaths well enough, and that the creation of a distinct osteopathic board, when other boards are being merged, would be entirely out of order.

Instead of the osteopaths being in control of their own examinations, the compromise Herbst bill makes the proposed consolidated board boss of the situation. To appease the

osteopaths the Herbst bill supporters have lifted into their act the standard of State recognition requirements set forth in the osteopathic bill.

These requirements are that any graduate of an osteopathic college of recognized standing with a four years' course, who has been in practice for two years, shall be entitled to a license without examination. Those not so equipped, after 1912, must come before the board and pass the general medical examination provided, from which, however, theories of practice are to be eliminated.

It is the idea of the "one-board" bill that this standard examination shall be met by applicants of all schools. These subjects are on the list to be faced: Anatomy and surgery, physiology, chemistry as applied to medicine, hygiene and preventive medicine, pathology as applied to medicine therapeutics, practice of medicine, including symptomatology, diagnoses and clinical history of diseases, gynecology and obstetrics, medical jurisprudence and toxicology.

There is an exception that no applicant shall be denied a license solely because he makes answers to the questions in therapeutics and the treatment of diseases which are based upon a medical sectarian teaching.

#### A Serum for Pneumonia.

(From the *New York Tribune*, February 16, 1909.

Two announcements of the production of an antitoxin for pneumonia have been made in the last few days. One comes from Boston, and credits men who are associated with the Tufts Medical College with the achievement. The other emanates from Darmstadt, Germany, where a physician named Landmann has been engaged in the same class of work. So confusing is the statement made to the first of these instances that no serious injustice will be done by ignoring it for the present. The second has a slightly stronger title to notice. Landmann's product is mentioned by a London medical weekly, "The Hospital," and is said to have met successfully tests prescribed by the Ehrlich Institute for Pathological Experimentation. Perhaps the strongest recommendation of Landmann's serum is the fact that he makes no boast concerning its virtues. He simply asks that practitioners try it in a few cases, employ the older treatment with the same number of patients, and then compare results.

Many previous attempts have been made to utilize the germs of pneumonia in the manufacture of a remedy for that disease. Some of them have been distinct failures, and regarding the value of the others there is still much doubt. It is said that most of the serums hitherto tried have proved too feeble to exert a perceptible influence. It is because something better is apparently needed that every fresh venture deserves attention. The warmest encouragement should be given to such endeavors, therefore, but their outcome should not be accepted without the most rigid criticism.

How important these efforts are one does not realize unless he recalls the fact that pneumonia now causes more deaths than any other disease. Tuberculosis once claimed more victims, but

has now lost that unfortunate distinction. The change in the situation is due to two causes. A more successful warfare is waged against the great white plague to-day than was conducted twenty or thirty years ago. Influenza, which was practically unknown to earlier generations, has been found an agency which predisposes those whom it afflicts to a variety of other disorders, among which is the most fatal of acute diseases of the respiratory organs. There is greater occasion now than ever for studying how to conquer pneumonia.

#### Sodium Benzoate Found Harmless.

(From the N. Y. Tribune, January 25th.)

Washington, Jan. 24.—That benzoate of soda used as a food preservative is not injurious to health is the judgment of the board of consulting experts to which the question was referred. Dr. Ira Remsen, president of Johns Hopkins University, is chairman of the board. This conclusion, which has been approved by Secretary Wilson, reverses the findings of Dr. H. W. Wiley, chief of the bureau of chemistry. Three separate investigations were made by the board, which, it is said, were in close agreement in all essential features.

The main general conclusions reached by the referee board are as follows:

First—Sodium benzoate in small doses (under half a gram per day), mixed with the food, is without deleterious or poisonous action and is not injurious to health.

Second—Sodium benzoate in large doses (up to four grams per day), mixed with the food, has not been found to exert any deleterious effect on the general health, nor to act as a poison in the general acceptance of the term. In some directions there were slight modifications in certain physiological processes, the exact significance of which modifications is not known.

Third—The admixture of sodium benzoate with food in small or large doses has not been found to injuriously affect or impair the quality or value of such food.

#### Chinese Ideas of Anatomy.

One of the most curious of the Chinese ideas of anatomy is the belief in the connection between certain internal organs and the thoughts and passions, writes a Shanghai correspondent of the Chicago News. Thus, the heart and pit of the stomach are regarded as the seat of ideas and delights; the soul resides in the liver, from which emanate all good and noble purposes; and in the gall bladder is contained such courage as the individual may possess.

The brain is never mentioned in Chinese medical works. The lungs are believed to be white, are in the thorax, and consist of six lobes, four on one side and two on the other. "Sounds proceed from holes in them."

Native doctors pretend that they can determine the nature of each ailment, its treatment and prognosis by the pulse alone. Du Halde, a Jesuit writer, includes a translation of one of the standard Chinese works on the pulse in his books on China. It appears from this that there are three pulses in each arm, each of which is again sub-divided into an inner and an outer pulse, making twelve pulses in all.

Of each pulse there are nineteen varieties, and every pulse is connected with and shows the



condition of some internal organ. Those on the left arm, for example, are connected with the heart, small intestines, liver, gall bladder, kidneys and bladder, respectively. The six pulses of each arm may vary at the same time and are supposed to be affected by the season.

It is amusing to read the description of the varieties of pulses that indicate the approach of death. The disease is likely to terminate fatally if any of the following symptoms are present: If the pulse frisks like a fish that dives every minute and then comes up so slowly that one could think she is held by the tail, and yet makes her escape; if it bubbles like water over a great fire in the morning; if it seems like a fish whose head is stopped and cannot move, but frisks with its tail; if by the hardness of its beats it resembles a bullet or stone or dried earth shot out of a cross-bow, or if it resembles the pace of a frog or toad embarrassed in the weeds, or the hasty peck of a bird.—From *Newark Evening News*.

## Medico-Clerical.

### THE EMMANUEL MOVEMENT.

(From *Colorado Medicine*, January, 1909.)

The wave of religious psycho-therapy, which has been sweeping westward from Boston, is just about due in Colorado. The object of this movement is to secure the co-operation of physicians and clergymen in the diagnosis and treatment of disease, so that those patients having physical ailments shall be left in charge of a physician, and those suffering from functional disorders amenable to mental treatment shall be placed in the care of a clergyman who will cure them by means of the reassurance and emotional uplift of religious faith. The physician is to make the examinations, select suitable cases for the clergyman, and then leave the treatment to him.

This movement is certainly more rational than some other schemes for mind cure, as it recognizes the existence of physical diseases and the necessity for accurate diagnosis, as well as the great power of religious ideas and feelings. It is sure to have a certain vogue, and the result will probably be a certain balance of good. Nevertheless we do not think it can have any large measure of permanent success, for the following reasons:

The exclusion of organic disease and of functional disease needing medical treatment is often a difficult and doubtful matter, requiring time as well as knowledge and skill. The case of apparently simple headache, of neurasthenic fear, or of hysterical loss of control which to-day seems purely functional, may in a week show new features which would easily escape an untrained enthusiast whose mind is fixed on mental treatment, and yet reveal to an experienced diagnostician a grave form of organic disease urgently demanding radical treatment. The danger of disaster from a wrong diagnosis is minimized when the patient is seen again at regular intervals; it is greatly increased when he is turned over to a non-medical practitioner for treatment.

Many functional diseases will not be benefited by an appeal to religious feeling; some will be

made worse. Melancholia, for example, which is exceedingly common and which at first seems especially suitable for treatment by religious consolation, is made worse by active religious thought of any kind whatever. The melancholic mind needs a rest from the appeals both of religion and of the highest human affections just as truly as an acutely inflamed knee needs a rest from walking. Only when convalescence is well advanced will religion or love have power to heal the sick soul.

Even if we consider only those neurasthenic and hysteric conditions in the treatment of which mental influences ought to be pre-eminent, still it is only in very rare cases that medical treatment is unimportant. Most cases are complicated by physical irritability of the central nervous system, disorders of digestion, circulation or assimilation, auto-intoxication, eye-strain or something of the kind requiring medical correction. True, these physical ailments may be favorably influenced—perhaps cured—by better mental processes, but the mind has enough to do without imposing on it a burden that could promptly be removed by a few well directed doses of calomel or a pair of skilfully fitted glasses.

Clergymen as a class are not sufficiently trained in normal and abnormal psychology to be safely entrusted with even the purely mental treatment of neurasthenic fears and obsessions and the bewildering freaks of the hysteric mind. In this part of the medical field the fullest technical knowledge and the skill derived from the longest experience find abundant exercise; merely amateur work is no more in place here than in designing a railroad bridge. It may be confessed that physicians in general are not so competent in this field as they ought to be, but they are improving and they have a long start of their clerical friends.

For these and other reasons that might be cited, we are sure that disease in any of its forms, general or local, physical or mental, ought to be treated by men especially fitted through training and experience to understand it and successfully fight it. Specialism will be more and more necessary on account of the vastness of the field of practical medicine, to say nothing of the enormous scope of its subsidiary sciences. But it will not be enough for the specialist to see his own chosen region clearly in all its details; he must see all the surrounding regions in relation to his own, and he ought to have a better knowledge of psycho-therapy than is possible for any one outside the medical profession. The most successful internists, surgeons and specialists are generally excellent psycho-therapists in their own field because they see things in proportion and their patients have a well-founded feeling of peace and security while in their hands.

What, then, of religion? A physician must treat patients of all beliefs. He cannot pretend to share the faith of each one, but he should respect it, and as far as possible, encourage it. Each patient should have all the consolation, encouragement and moral support that his own religion can give, and by all means let him receive this through his pastor. Let the physician urge him to go to his pastor when it is especially desirable, but let him keep the details of treatment, both mental and physical, under his own control. Let the minister be a minister of religion, and not discredit both religion

and medicine by undertaking a delicate, difficult and dangerous work for which he is not fitted.

### The Earliest Emmanuel Movement.

(From *The Interior*, Chicago, Ill., December 24, 1908.)

"Let not your heart be troubled; believe in God; believe also in Me."

This Emmanuel movement that people talk about so much—it's not so new as people imagine; what's genuine and dependable in it started a long time ago—nineteen hundred years ago when one night in a quiet room a quiet Man who said these great brave words of peace was himself Emmanuel—"which is, being interpreted, God with us."

For the abiding religious essence of the Emmanuel movement is just this—God is with us, and so there can't be anything to worry about.

If the church all the while had clung to the warm, immediate, simple personalism of the Lord Christ's message—and not been so much preoccupied with the prides and problems of its own complex organism—the world would have been by this time so full of the courage of divine companionship that it couldn't have dreamed of needing any "movement" to brace up discouraged folks. Just the ordinary everyday church would have appeared to everybody the one special institution expressly meant for that.

Jesus Christ had a great many big objects in mind for both time and eternity, but one of his biggest hopes was to give this temporal world a race of men who could face all its troubles with untroubled hearts—serene, fearless, overcoming and unovercomable—just because they believed that the Almighty Maker who constructed the universe hadn't let go of it and continued entirely competent to bring all its workings out right.

But of course he never expected that saying over a creed would manufacture men of that mettle. When he said "believe," he meant for his friends to live into the fact and go the length of its consequences. One must pitch himself headlong on to the truth, and find by the crucial trial of it that it will bear his weight, before he can know the strength and calm of it.

How can a man's heart be troubled if he believes in God and in Jesus Christ? If you believe in God, you must know there is power enough in the universe to take care of you, and if you believe in Jesus Christ, you must know there's love enough in the universe to want to take care of you. Where then is a show of reason for not being cheery and confident and courageous and conquering?

But, you say, this can't be the same as the Emmanuel movement. Jesus never talked about "transliminal" and "subconscious" and "latent reservoirs of personality."

No, He didn't; He always talked plain things that the plain people could get straight at. But nevertheless all these modern discoveries in psychology—so far as they do actually get into the constitution of the human mind—are not contradictions but confirmations of what He said.

It's an added reason for believing in God and trusting one's life to Him when one learns

that God has made up the central core of a man's soul so that unsuspected possibilities of power develop out of it whenever a man straightens up and determines that he is going to live with all his might against the evil and for the good.

When the scientists tell you of that power, seize it—and thank God for it. It's a new token that you have God and His tremendous wisdom on your side.

There's no error in trusting to the limit the proposition that things must fall out right for the man who walks where he sees the footsteps of the Almighty leading him. The only error is in assuming that God is bound by a contract to furnish every man who follows, nice pleasant walking all the way.

All the contract is that you will be glad you came His way when you get to the end.

Christian Science takes for granted that the only real blessing is bodily health. Some Emmanuelites seem drifting that way—health wrong, all wrong. God never indorsed that idea.

The Captain of creation won't coddle folks into being good. Sometimes he has to put a penalty on decency to keep weaklings from adopting it for a "snap." He is always hunting for men who have the nerve to stand rough treatment without whining.

It wasn't all a truth, but at least seventy-five per cent. of one when Professor Foster, Chicago University's "arch-heretic," said: "Christ did not come to relieve pain, but to make men able to do something no matter how much pain it costs."

Nevertheless, holding to all this, a strong man is yet entitled to fortify his strength with the great fact, standing true amid all life's uncertainties, that the best things in health and in comfort and in good fortune belong after all to the people who stick to God and live up to His laws.

There's no guarantee about it, but nature and society are so ordered and over-ruled that a good trustworthy average of the better things in life is all the time happening to the better people.

So there is true, hard experience of men to back up the common sense of the Master's argument, which amounts to this:

"If you believe in God at all, you ought to believe in Him intensely enough to take whatever comes to you with triumphant good cheer."

All this is so vital a part of the Master's message that His church ought constantly to preach it.

If, however, various congregations and preachers are resorting to this "Emmanuel movement" simply because—as Ray Stannard Baker in his elaborate article on the subject in *The American Magazine* seems to intimate—they are beaten out of everything else they have been doing and don't know any other way to save themselves, they will soon "fizzle out" at this "healing agency" business just as at their former expedients.

But if any church, because it sees that people around it need comfort and quieting and confidence and peace, runs forth and draws them near where Jesus can lay his hand upon them and heal them, that church will go on in an increasing ministry doing this good thing with manifold other services.



For the church that does anything to save itself will die; but whatever any church does to save others will live, and thereby the church will also live.

### The Emmanuel Movement as Seen by a Clergyman.

From the *American Medical Association Journal*, Feb. 20, 1909, Editorial.

The most recent invasion of the field of medical practice is found in the widespread adoption of the Emmanuel movement by ministers and religious teachers of various denominations. An unusually timely and rational estimate of this movement from the standpoint of the clergyman is an article by Rev. George A. Gordon in the *Congregationalist* for February 13, under the title "The Practice of Medicine by the Unfit." Dr. Gordon defines the practice of medicine as "the treatment of human beings, in a pathologic condition, as the subjects of physical disorders and diseases."

After relating his experience with Eddyism and emphasizing the utter ignorance of the followers of this cult of even the elementary facts of anatomy and physiology, Dr. Gordon says: "The most recent phenomenon is the emergence of the preacher of religion as a medical practitioner, his wizard wand being psychic force. Here again the interest is great and generally the motive of the healer is pure. Disease abounds; the mystery of pain is widespread; suffering is one of the horrors of existence. The forces at work for cure, relief, mitigation, noble and efficient as they are, manifestly are unequal to the need. Can we not invent some new therapeutic agent that will work wonders, that will change like the rising sun, night into day? Just at this point the delusion of the religious healer becomes plausible." The fact that the principles taught as new discoveries are in reality as old as human relations is then clearly brought out. "That psychic force is a healing agent no man will deny. . . . The personality of a vigorous, wise, humorous, sympathetic and noble human being, in any vocation, is a distinct influence for health in the community in which he lives. . . . But is not all this as old as the relation of parent and child, teacher and pupil, prophet and people? . . . Have not all wise preachers in all generations always done the attainable service which these psychotherapeutists have turned into cult? . . .

The psychic treatment of disease is apt to become a craze. An auxiliary force strictly limited in availability and always requiring for its use a level head is turned into a panacea in cases that call for a scientific physician. In pathology we enter the domain of a disordered or diseased physical organism. No man has the least moral right in this domain but one scientifically competent. . . . I do not know a single member of my profession who could pass a first year's examination in any reputable medical school in the country." After carefully considering and enumerating the large amount of work and training that enters into the preparation of the modern, educated physician, Dr. Gordon says regarding the monstrous confidence with which persons, largely without knowledge and with no special training, rush

in as healers that "they are monumental examples of the 'blind persistent courage of the book agent.'"

Looking at the movement from the point of view of the clergyman, Dr. Gordon finds the situation unfortunate in that the minister, when he becomes a healer, abandons the calling for which he has been specially trained to take up a work for which he has no training and no ascertained ability and which he cannot by any possibility do well. The resulting confusion he considers unfortunate from the viewpoint of the patient, since it leads him to underestimate the value of the services of a true expert; turns him away from the only true source of relief, namely, scientifically qualified men; and raises in him false expectations and superstitious feeling. The church, he concludes, also suffers. "A hospital is one of the most benign of all the institutions created by man, but a hospital is not a church. . . . The mission of the church is not primarily to the sick but to the well. . . . Its chief mission is to the strong that they may secure justice and mercy." Reviewing the value of churches as moral and philanthropic agents in a community, he says: "Turn now any strong church into a sanitarium for those who are really ill and for those who only think they are ill and you bereave the ideal causes of a community in a cruel manner." "Hence," he concludes, "let the church and the hospital continue as separate institutions; let the people in the church continue under the care of the preacher, and those in the hospital under the care of the physician, and let the master spirit in each call on the service of the other in time of need."

Dr. Gordon's discussion of this movement is remarkably sane. His closing paragraph can be commended to the careful consideration of all enthusiasts and faddists who aspire to assume, without preparation, the work which is being done painstakingly and with constantly increasing efficiency by men who have devoted their lives to preparation for it. "The ideal of knowledge is infinite; the attainment, the perfection of specialists has a clear and pathetic limit. It remains for the individual man to do the small bit of work for which he is fitted; to let religiously alone the work for which he is manifestly unfit, and to bear in mind that about the best thing that good men can do for the noblest causes is to go through the world with a level head."

### SOME ASPECTS OF PSYCHOTHERAPY.

J. J. Thomas says in the *Boston Medical and Surgical Journal*, January 7, 1909, among other things, the following on the so-called "Emmanuel Movement." He does not wish to be understood as opposing the broadening of the work of any church, feeling that this particular idea is one for the churches to consider according to their individual needs and situations. It seems to him, however, that the moral bearings which arise in certain cases of functional nervous disease are better treated by physicians than by clergymen, just as the moral bearings of venereal disease and the sexual relations can be and are better handled by the physician as they are being handled in the broadest and best way by many conscientious Christian physicians, every

day of their lives. The introduction of religious sentiment, not to say religious sentimentality, into the treatment of psychic disorders is distinctly harmful. Finally the careful individual study required for the proper selection of the method best adapted to the cure of the parient case precludes their being treated and handled in numbers in classes. All methods of treatment of disease are with greater safety left in the hands of medical men, and by co-operation with clergymen in the future as in the past, the often perplexing moral and religious questions that may arise in these curious functional nervous disorders can be best met. This presupposes, however, that medical men, at least those fitted for the work, shall interest and inform themselves of methods of study and treatment of such cases or the latter will fall into the hands of quacks and pretenders to treat, and because of the possibility of cure by suggestion, will spread the fame of this unscrupulous class.

## Reports of County Societies.

### GLOUCESTER COUNTY.

**Howard A. Wilson, M. D., Reporter.**

At the annual meeting of the Gloucester County Medical Society, held at Woodbury, January 21, 1909, the following officers were elected:

President, Dr. Charles D. Pedrick, Glassboro; vice-president, Dr. Cyrus B. Phillips, Pitman; secretary and treasurer, Dr. George E. Reading, Woodbury; reporter, Dr. Howard A. Wilson, Woodbury; censors, Dr. James Hunter, Jr., Westville; Dr. Luther M. Halsey, Williamstown; Dr. Harry A. Stout, Wenonah.

Delegate to Medical Society of New Jersey, Dr. Charles S. Heritage, Glassboro.

Delegates to Camden County Society, Drs. H. A. Stout, H. B. Diverty, J. G. Edwards, C. S. Heritage, H. A. Wilson.

Delegates to Salem County Society, Drs. E. M. Duffield, H. A. Stout, William M. Stratton.

Delegates to Cumberland County Society, Drs. B. F. Ogden, G. E. Reading, C. F. Fisler. Delegates to Atlantic County Society, Drs. G. E. Reading, L. M. Halsey, William Brewer.

Delegates to Burlington County Society, Drs. H. A. Stout, George M. Laws, Jas. Hunter, Jr.

There was a large attendance and the papers on "Leprosy" by Professor Daland and Dr. Hurff were very interesting and instructive.

### March Meeting.

The regular meeting of the Gloucester County Medical Society was held at Paul's Hotel, Woodbury, March 18, with a fair attendance of the members and several visiting delegates.

Scarlet fever, diphtheria and la grippe were reported from various sections of the county. The cases of scarlet fever were almost invariably of a mild type.

Dr. J. W. Kennedy, of Philadelphia, read a very instructive paper on Ectopic Gestation, from notes of 169 cases. The paper was discussed informally by Drs. Edwards, Duffield, Heritage, Ashcroft, Reading, Laws and Wilson, with brief reports of cases they had observed

in practice, and we are led to believe that this is a more frequent accident in pregnancy than was formerly thought to be the case.

Dr. Hillegans reported a case of confinement at full term with birth of a healthy child, followed in a few minutes by the delivery of the placenta and a three months' foetus.

Dr. Richardson, of Camden, spoke of a similar case occurring in his practice.

After adjournment the society entertained at dinner Dr. Kennedy, and also Drs. Strock, Richardson and Iszard, as delegates from the Camden County Society.

### MORRIS COUTTY.

**Henry W. Kice, M. D., Secretary.**

The Morris County Medical Society held a very interesting annual meeting in Hotel Dover, Dover, N. J., March 9, 1909.

Several interesting cases were reported, one by Dr. G. H. Foster, of a meningeal tumor, seventeen inches in circumference, containing blood, cerebrospinal fluid and brain mass growing out from the occiput. The patient was operated on four weeks ago, and is doing very well at the present time. The president, Dr. C. C. Beling, gave an address on Psychotherapy. Dr. Martland, of the Newark Hospital, gave pathological demonstrations. Dr. Emerson spoke on tuberculosis, and emphasized the importance of educating the laity concerning cure and prevention. Dr. B. D. Evans spoke on recent and proposed legislation.

The following officers were elected for the ensuing year: President, Dr. Augustus W. Condict, of Dover; vice-president, Dr. Peter S. Mallon, of Morris Plains; secretary, Dr. H. W. Kice, of Wharton; treasurer, Dr. James Douglas, of Morristown; reporter, Dr. J. W. Farrow, of Dover.

The following is the Program Committee: Drs. J. W. Farrow, of Dover; F. W. Flagge, of Rockaway, and A. A. Lewis, of Morristown.

Delegates to the State Society: Drs. C. C. Beling, of Newark, and A. E. Carpenter, of Boonton, with Drs. E. M. Fisher of Morris Plains, and F. H. Glazebrook, of Morristown, as alternates.

Dr. William J. Chandler, secretary of the State Society, was present, and spoke on the subject of Medical Defense, which was now under consideration, and would be considered and acted upon at the annual meeting in June, at Cape May. Discussion of this subject followed, and the general expression of the members was favorable to the adoption of the plan, but the members preferred not to instruct the delegates.

The following were appointed as the Committee on Legislation: Drs. B. D. Evans, A. E. Carpenter and James Douglas; also committee on National Health Bureau, at Washington, D. C., Drs. Evans and Carpenter.

The next meeting of the society will be held in Morristown, June 8, 1909.

### SALEM COUNTY.

**John F. Smith, Reporter.**

The regular February meeting of the Salem County Medical Society was held at French's Hotel, Woodstown, on February 3d, with a



large attendance and an unusually interesting program.

Dr. Henry R. Wharton, of Philadelphia, gave a very instructive talk on symptoms simulating appendicitis, referring especially to typhoid fever, diseases of the intestines, renal disease, inflammation of the gall bladder, pneumonia in children, diseases of the tubes and ovaries and iliac abscess.

This was followed by remarks by Drs. Chas. P. Noble, of Philadelphia; Joseph Nicholson, Paul Mecray and W. H. Iszard, of Camden.

Drs. James Hunter, of Westville; W. M. Stratton, of Woodbury; Clarence Garabrant, of Atlantic City, and C. W. Thomas, of Woodstown, were also guests of the society.

Drs. W. H. Carpenter, R. M. A. Davis and C. M. Sherron were appointed a legislative committee.

After the regular business of the society dinner was served and the society adjourned to meet at the Schaeffer House in Salem on May 5th, for the annual meeting.

### Meetings of County Societies.

Camden.—At Dispensary Building, Camden, April 27, 12 o'clock noon.

Cape May.—Hotel Bellevue, Cape May Court House, April 6, 11 o'clock a. m.

Essex.—Auditorium Hall, Newark, April 6, 8 p. m.

Hudson.—Lincoln Hall, Jersey City, April 6, 8.30 p. m.

Middlesex.—Schussler's Restaurant, New Brunswick, April 21, 5 p. m.

Morris.—Morristown, June 8, 1909.

Passaic.—Braun Building, Paterson, April 13, 8.30 p. m.

Sussex.—Cochran House, Newton, May 11, 11 a. m.

Union.—Elizabeth General Hospital, Elizabeth, April 14, 3.30 p. m.

The secretaries of the county societies are requested to notify the editor, Dr. English, New Brunswick, of meetings to be held after May 1, 1909, giving time, place and hour.

### Medical Inspection of Schools.

(From the *Evening News*, Jan. 29, 1909.)

The Board of Education last night appointed a new staff of medical inspectors of schools, the members of the old staff having all tendered their resignations, by request, when the board took sole charge of this department of school work. The appointments were made on the recommendation of the Committee on Buildings and Grounds. Ten of the sixteen physicians selected were members of the old staff.

The appointees were as follows: Drs. William O'Gorman Quinby, Sumner Shailer, M. Royal Whitenack, Max Feldman, William D. Bleick, Oscar A. Mockridge, S. B. W. Leyenberger, Max A. Maas, James A. Coyne, H. A. Sheppach, Theodore Teimer, George W. Hahn, Sarah M. Edwards, Rudolph Braun, Hugh J. Devlin and P. M. O'Reilly. The new members among these are Drs. Mockridge, Leyenberger, Hahn, Maas, Coyne and Teimer. Those who retired from the service were Drs. W. S. De Voursney, Louis A. Koch, George W. Davies and Carl H. Wintsch. One physician was selected in place of Dr. F. S. Gordon, who resigned

a year ago and whose place had not been filled, and another took the place of Dr. George J. Holmes, now chief of the staff. Dr. Holmes's official title was changed to supervisor of medical inspection. New rules were adopted for the guidance of the staff and also for the work in inspection to be done by school principals and teachers.

### Union County's Milk Commission.

As a result of the pure milk agitation by Dr. Henry L. Coit, of Newark, Union County physicians will hereafter have charge of the granting of an official seal of purity for milk. Dr. W. H. Murray, of Watchung avenue; Dr. Arthur Stern, of Elizabeth, and Dr. Stephen Quinn, also of Elizabeth, have been appointed as a milk commission by the Union County Medical Society. The appointments were made at the annual meeting of the society held in Elizabeth. The commission is to hold an organization meeting at the home of Dr. B. V. D. Hedges, Plainfield, president of the society, on February 25th, at which time the respective terms of office were decided upon.

The work of the commission will in no way interfere with the surveillance of milk by the boards of health of the various cities in the county. There are, however, certain dairies where the milk is marketed under the most sanitary conditions, and a higher price is charged for such milk, largely bottled for infants' use. Such milk represents the highest standard of milk purity. The commission will supervise the bottling of this milk and will appoint dairy inspectors and arrange for frequent examination of samples. The office is unremunerative. Dairymen who wish the official recommendation of the commission must make application for the examinations and tests. At the meeting a dairy inspector and veterinary were appointed and a system of milk analysis decided upon.

### Newark Health Board Changes.

The Newark Board of Health has created a new position on the staff of the City Hospital, Physician for Children's Diseases, and appointed Dr. Elliott. Dr. William Gauch was appointed gynecologist to fill the vacancy caused by the resignation of Dr. Emil Guenther, and Dr. James H. Lowrey was made his assistant.

### New Members of the American Medical Association of New Jersey.

Clock, R. O., Burlington.  
Martine, Frank L., Newark.  
Mingham, Wm. D., Newark.  
Nay, Charles L., Jersey City.  
Porteous, E. J., Atlantic City.

As an example of the layman's watchfulness of the apathy of internal medicine in re treatment—a gifted lady writer recently contributed: "The function of the physician is to amuse the patient while nature cures the disease."—*Bull. Jour. of Animal Therapy*.

# THE JOURNAL

OF THE

## Medical Society of New Jersey

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APRIL, 1909

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 252 Main Street, Orange, N. J.*

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Read the advertising pages. There are new advertisements each month. There are many articles offered which will be useful to you. Important notices often appear only in these columns. And don't forget in writing to the advertiser to mention that you saw his advertisement in the Journal of the Medical Society of New Jersey. C.

The editor returns his sincere thanks to the many of our readers who sent expressions of sympathy during his three weeks' illness, which were greatly appreciated, and he again apologizes for the mistakes in the March issue which went to press during the period of his illness, though he is pleased to know that two of his own editorials suffered most—one in the omission of two lines; we hope our members in that case were able to "read between the lines."

We are sorry to have the Journal go to press without being able to give any definite information as to the outcome of legislation affecting the health interests of the State. The bills which our Committee on Legislation has had introduced, and those which they are opposing as harmful, are still unacted upon. Members of our profession who have visited Trenton to sustain our Committee, have generally come to the conclusion that the ways of too many of our legislators are past finding

out, and that the question of party politics plays entirely too great a part in legislation where it should never be considered, and especially when the health and lives of our citizens are jeopardized thereby. We shall have something more to say on this matter later.

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### FOOD PRESERVATIVES.

We have heretofore refrained from expressing our opinion on the question of the use of benzoate of soda as a food preservative, not because we were indifferent, or had no convictions on the subject. We believed from the first and are now thoroughly convinced that the appointment of the Referee Board, composed of some of the most eminent scientific chemists of this country, was one of the best methods that could have been adopted for arousing public interest and discussion, and settling—not the question merely as to whether the addition of a small quantity of benzoate of soda was deleterious to health, but the broader, vastly more important question as to whether our pure food laws should be maintained and the manufacturers should be compelled to give us wholesome, untainted food, free from adulteration and unnecessary—if not harmful, preservatives, even though this latter question was not within the scope of the Referees' investigation.

Hence we have not joined in the adverse criticisms of Dr. Wiley, and in the cry for his removal. He has thus far done a grand work: that he should be continued in office to carry forward and complete it, seems right from the fact that the enemies of stringent pure food laws desire his removal. If in error concerning the effect of benzoate of soda on health, he has erred on the safe side, and after all that has been said pro and con, the vital questions are: Is the use of benzoate of soda or other questionable preservatives conducive to health? Are they necessary? Does their use contribute to negligence or carelessness in methods of preparing these foods,



or enable the manufacturers to conceal the use of inferior, unwholesome or tainted foods, which ARE injurious to health? These are the practical questions which need investigation and public discussion, and the report of the Referee Board, whether we agree with its decision or not, has brought this question more prominently before the public than it otherwise would have been, and awakened an interest which will lead to the right settlement of these practical questions.

One of the most significant facts in the controversy concerning the use of benzoate of soda as a food preservative is that a large number of prominent manufacturers are taking the stand that with pure foods put up under the advanced methods of manufacture—thorough sterilization, etc., in buildings in proper sanitary condition, there is no need of benzoates or other preservatives. For years it had been insisted upon that fruit syrups and crushed fruits for soda water fountains could not be kept in good condition without the use of artificial preservatives, and the head of one of the largest manufacturing companies in the country is said to have been one of the most active lobbyists against the pure food law, arguing that their business would be ruined if the use of preservatives were prohibited. A short time ago this very company inserted an advertisement in the *American Druggist and Pharmaceutical Record* declaring substantially that experience had not only proved the use of preservatives to be unnecessary, but that they secured a better product without them, and announced that the use of benzoates and other preservatives has been discontinued in the preparation of its goods. Several other large manufacturing companies have made similar announcements.

We believe that two things are necessary to advance and complete the warfare against impure or unwholesome foods.

1. Compel every manufacturer of food preparations to have placed on every container sent out a printed label stating

whether it contains any preservative, and if so the quantity, just as the manufacturer of proprietary medicines is obliged to do concerning the presence and quantity of alcohol.

2. Give the public to understand that it is best—safest—to use the products of the manufacturers who use no preservatives, because the foods put up by them are most likely to be pure and to have been put up under strictly sanitary conditions; that the others are at least open to suspicion.

### TUBERCULOSIS AT ASHEVILLE.

In the Virginia Medical Semi-Monthly of March 12th, there is an interesting paper by a prominent physician of Asheville, N. C., giving the report of 2,132 cases of pulmonary tuberculosis treated in the Asheville climate from 1897 to January 1907. The doctor claims that "this report shows conclusively that a very large per cent. of selected cases of tuberculosis treated in a rational manner in the right climate do become arrested or cured." The number reported were doubtless such "selected" cases as he states that the report "does not include patients who were taken on probation and treated for some thirty to sixty days, and then sent home or advised to try other climatic points, because there was no sign of improvement." The number of the latter cases is not stated. The essentials of treatment are stated at some length: climate, food, nitra-pulmonary medication and internal medication. Particular stress is laid on climate, and some statements are made which will not receive universal endorsements. We quote the following points:

"By a suitable climate, I mean an atmosphere which is practically non-germ-laden, high and dry; a climate that is opposed to sepsis. Just such a climate as exists here and at four other points, so far as I know on earth. \* \* \* Indeed it is doubtful if pulmonary tuberculosis can be treated successfully in any other climate than one similar to that described. \* \* \* I will state that no case of tuberculosis can be treated to the best advantage out of a good climate. And I wish to denounce the practice of States or municipalities treating tuberculous subjects when they have not the proper climate within their borders."

This is strong language, but do the facts warrant these positive statements as to the improbability of the arrest or cure of tuberculosis outside of a climate like that of Asheville. As to the efforts to cure these cases where climate is not up to the standard, which this paper insists upon, we are quite certain that the intelligent workers engaged in the vigorous warfare against tuberculosis throughout our country will not be persuaded to give up, or abate their zeal in, the fight because they have not the ideal climate, and send their tuberculous cases to one of the "five points on earth" that have suitable climates, when at one of these points it is stated that some of the patients were "advised to try other climatic points, because there were no signs of improvement" after being "treated for some 30 to 60 days."

We will not now fully discuss the question of suitable climate as an important factor in the treatment of tuberculosis. All will admit that the out-door life is the ideal life for these patients. Where choice can be made it is often wise to make selection of proper climate; but in the vast majority of cases it is impracticable, if not impossible for obvious reasons. Where this cannot be done, shall we, *dare* we take the position that these patients are to be abandoned to their fate not only, but also to become a menace to the other members of their families and to the public?

Instead of "denouncing," we say all honor to the States and municipalities that are awake to the vast importance of caring for the great number of sufferers from tuberculosis and of adopting wise and effective measures to prevent others from contracting the disease. Where climatic conditions are not the best it is wise and right, and the results, as demonstrated by reliable statistics, even there are encouraging the workers and strengthening their belief that this great plague of humanity will be removed. We will go further and say that where

the climate is very unfavorable—the worst—and the environment of the patient is positively bad, even there—and more so in such cases—energetic efforts should be made to control and cure the disease. And such efforts have given comparatively good results.

The author of the paper gives a synopsis of these 2,133 cases from which we take the following:

"There are sixteen hundred and nine of the cases known to be living and 117 cases known to have relapsed and died. \* \*. \* With the remaining 407 of the 2,133 cases I have been unable to obtain communication, but they possibly retain a smaller ratio as to recovery than the other cases reported, because they were less intelligent than the sixteen hundred and nine known to be living."

While the figures seem to be favorable as to the claims for the Asheville climate and the treatment given, we regret that the doctor has not been able to give fuller data as to the condition of the living when received and at the present time; the time of their sojourn at Asheville; the length of time they have remained cured, or that the disease has been arrested; also the number sent home, after from 30 to 60 days of treatment, unimproved, which cases are not included in this report. We, however, fully appreciate the difficulty of tracing cases when many of the patients leave these resorts for distant points and fail to send subsequent information.

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### THE MIDWIFERY BILL.

We refer to an Act to Regulate the Practice of Midwifery in the State of New Jersey, which has been introduced into the Legislature, and which we are informed is likely to pass. This bill has been carefully drawn by Dr. E. L. B. Godfrey, president of the State Board of Medical Examiners. It will be found in full elsewhere in this issue of the Journal. Such a bill is most imperatively demanded, as we have far too many midwives who are utterly incompetent, whose mismanagement is not only furnishing a large number of cases for our gynecologists—from the conscientious gynecologist's as well as



the patient's view points,—but is also causing very many deaths of both of infants and mothers. There ought to be no doubt about the passage of the bill.

### SCIENCE AND RELIGION.

We offer no apology for the insertion in this issue of our Journal of a Medico-Clerical Department. The two professions—medical and clerical—are very closely related, and although each has its distinct functions and has responsibility enough within its own sphere of activities to demand the best possible thought and effort, yet there are conditions and opportunities where each may assist in making the other's duties easier and more successful to their own comfort and profit and to the benefit of those whom they serve and seek to relieve.

There should be no conflict between science and religion. We have been deeply impressed by the wonderful change in the attitude of the great leaders in scientific research toward religious truth during the past half century. Instead of an occasional scientist who believed in and embraced Christianity, the vast majority of the ablest men of science to-day are believers in the Christian religion and many of them are active in Christian work. This is so especially in this country, Great Britain and Germany. A movement in the latter country is worthy of special note—the organization of the “Keplerbund,” which already includes over 600 scientists, many of them of international reputation. This has been viewed as a decided reaction against the “arrogant scientific overlordship of Haeckel,” the atheistic natural philosopher of Jena. The avowed purpose of the “bund” is to establish the principle that theism is just as scientific as materialistic monism, which Haeckel assumes to be the marrow of science. The “bund” bears the name of Kepler, the great German astronomer, whose devout ejaculation, “O God, I do but think Thy thoughts after Thee,” is, in brief, the expression of the spirit in which

science and religion are truly harmonized.

There is every reason why a scientific medical man should be a believer in God. The founder of the Christian religion was the “Great Physician,” the most active member of his chosen band was known as the “beloved physician,” and the contemplation of the wonderful creature called man in his trinity of being—body, mind and spirit—ought to convince the educated physician above all others that he had a Creator, for he best knows the marvelously intricate mechanism of, at least, the body and mind of man. We note that the first president of the Medical Society of New Jersey was a clergyman as well as a physician, and another fact of great significance, that the most effective and most promising work in missionary fields to-day is being done by well-trained medical missionaries who are doing brilliant work as physicians and surgeons—most of them where they are the only educated medical men; we cite only Dr. Grenfell, of Labrador.

Therefore, we say that there should be the most cordial relations between the members of the medical and clerical professions and hearty co-operation within proper bounds; and at the same time express our decided conviction that each ought to recognize his legitimate sphere of action without doing damage and injustice to the other, and certainly without attempting that for which he has not the knowledge and training requisite, when that lack means damage or possible death to those whom he serves.

### THE EMMANUEL MOVEMENT.

Under the heading Medico-Clerical will be found three articles worthy of careful reading—on the Emmanuel Movement—one from a medical journal, another from a religious journal, and the third an editorial from the A. M. A. Journal which quotes, at considerable length, a clergyman's views of the movement. We believe that these articles set forth clearly

and forcefully the views of the great majority of the members of their respective professions. With most of the views expressed by the authors we are in full accord.

It is unnecessary in addressing medical men to argue or expatiate upon the influence of the mind on the body when both are in comparatively normal condition, or of the increased influence when one or both are in an abnormal state. We know how the mind may favorably or unfavorably influence disease and functional disorders. But it is well for the physician to bear in mind the facts he knows but is so prone to forget, and in the treatment of disease, to treat the abnormal condition of the mind as well as that of the body. Had the medical profession in the generations past done so, we would never have heard of the fads of faith healing, Christian Science or other isms, or even of the Emmanuel Movement, which have led astray so many good people. We do not mention the latter as equally faulty with the others; in its original conception and within proper bounds it might do some good; but because of our fear that it will drift into the Christian Science—more properly designated un-Christian, non-scientific movement; because of our conviction that the treatment of disease does not come within the province of the clergy, who are not capable of making diagnoses, recognizing developing complications or prescribing intelligently, and because of our belief that they have work and responsibilities enough without assuming those of the medical profession.

We have said let there be cordial relations and hearty co-operation, because there is an important field which is legitimate for the minister and of great importance, and of great helpfulness to physician and patient—bringing the peace, comfort and hope of the gospel. The physician is a believer in psychotherapy and practises it—he is the only one competent to practise it, and he will welcome the clergyman's assistance in this special feature of

his work. The physician surely knows the advantage of having his patients possess a peaceful, contented mind, a cheerful disposition and a spirit of hopefulness. Let us as physicians seek to have them possess these important mental conditions and inspire them with the belief that we understand their cases; with confidence that we will do everything in our power for them, and then seek to have them hopefully trust their health and lives in our hands. Let them have sunshine and good cheer from outside the home and all possible inside.

There are a few don'ts that we doctors must heed if we would be successful psychotherapists: Don't put on long faces or wear an anxious expression—the nervous person reads the doctor's face like a book; don't detail to them serious cases or tell them of every sudden death, or any depressing news; don't play the false Christian Scientist and deceive them, but be the true Christian scientist and tell them the truth mixed with comfort; don't let them see quack advertisements, or friends who recommend quackery or retail depressing gossip. We will then be practical in our practice of psychotherapy, win the confidence of our patients, be esteemed by them as "beloved physicians," do our part in co-operating with the clergy and relieve the latter of considerable work and responsibility.

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Attention is hereby called to a statement made elsewhere by the Committee on Publication in reference to reprints of papers appearing in the Journal, and also concerning plates or cuts desired by authors of papers.

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**Do not forget the Annual Meeting of the Medical Society of New Jersey, June 22, 23 and 24, 1909, at Cape May. Plan, if possible, to attend.**



## CORRESPONDENCE—A REQUEST.

### Atropine as an Hemostatic.

Dear Doctor: I am collecting material for a paper upon atropine as an hemostatic, and would be obliged to any of your readers who would send me notes of their experience with this remedy. I am particularly anxious to receive adverse reports, as well as those favoring the remedy.

Thanking you for the courtesy of inserting this note, I remain,

Very sincerely yours,

WILLIAM F. WAUGH.

1424 Ravenswood Park,

Chicago, Ill., March 1, 1909.

## Medical Education.

### Council on Medical Education.

The fifth annual conference of the Council on Medical Education of the American Medical Association, will be held in the Auditorium Hotel, Chicago, Ill., April 5, 1909.

At the morning session, 10 o'clock, the program will consist of an address by the chairman, Dr. A. D. Bevan, Chicago; report of the secretary, Dr. N. P. Colwell, Chicago; report of Committee on Medical Curriculum, subjects and speakers as follows: Anatomy, including Histology and Embryology, Dr. C. R. Bardeen, Madison, Wis.; Physiology and Physiologic Chemistry, Dr. E. P. Lyon, St. Louis; Pathology and Bacteriology, Dr. W. T. Councilman, Boston; Pharmacology, Toxicology and Therapeutics, Dr. T. Sollmann, Cleveland; Medicine, including Nervous and Mental Diseases, Dr. G. Dock, New Orleans; Surgery—General and Special, Dr. C. H. Frazier, Philadelphia; Obstetrics and Gynecology, Dr. J. B. De Lee, Chicago; Diseases of the Eye, Ear, Nose and Throat, Dr. G. E. de Schweinitz, Philadelphia; Dermatology and Venereal Diseases, Dr. W. A. Pusey, Chicago; Hygiene, Medical Jurisprudence and Medical Economics, Dr. F. F. Westbrook, Minneapolis.

At the afternoon session, 2 o'clock, the following will be presented and discussed: Some Results of Higher Standards of Preliminary Education, Dr. R. H. Whitehead, Charlottesville, Va.

The Character of the State Medical License Examination, Dr. Fleming Carrow, Detroit, Mich.

### Advance of Requirements for Entrance to the Medical Department of Western Reserve University, Cleveland, Ohio.

The Medical Department of Western Reserve University was one of the pioneers in demanding some college work for entrance. In 1898 it announced that, beginning in October, 1901, the completion of the junior year would be required for entrance. In the eight classes which have entered since 1901, an average of 86 per cent. of the matriculates have either held a bachelor's degree on entering or have obtained it at the end of the first medical year.

In May, 1908, the faculty unanimously voted to recommend a further advance in entrance requirements to the point of requiring a degree for unconditional entrance, but to admit conditionally a man who had completed the junior year in a standard college (conditioned on the degree being granted by the college from which he had come before his entering the junior year in this medical department). In November, 1908, this vote was unanimously reaffirmed, and on December 17th, 1908, the Board of Trustees of Western Reserve University voted that beginning with the academic year 1910-11 (i. e., in October, 1910) the following requirements for entrance to the Medical Department of Western Reserve University shall be in force:

I. Time Requirement.—1. The requirement for unconditional entrance to the Medical Department of Western Reserve University shall be graduation from an approved college or scientific school granting the degree of A. B., B. S., Ph. B., Litt. B. (or equivalent), following the completion of a course of at least three collegiate years, and including all the subject requirements enumerated under II.

2. Conditional entrance will be granted upon the completion of the work of the junior year in the course of an approved college or scientific school, enforcing a four-year course, leading to the degree of A. B., B. S., Ph. B., Litt. B. (or equivalent degree), including the subject requirements enumerated under II., conditioned upon the student obtaining a baccalaureate degree before he enters the third year in the Medical Department of Western Reserve University.

3. Students who have obtained their academic training otherwise than in institutions conferring the above degrees (for instance, at foreign institutions of collegiate standing), may be admitted on presenting evidence, by acceptable credentials, or by examination, showing that their education is fully equivalent to that implied by a degree from an approved college or scientific school, including the subjects enumerated under II.

II.—Subject Requirements.—All candidates for admission under I. must show by examinations, or by acceptable credentials, that they possess such knowledge of Inorganic Chemistry, Physics, Biology and Latin, as may be obtained by satisfactory completion of the following courses:

A. Inorganic Chemistry, including Qualitative Analysis, as represented by a course containing at least five actual hours per week through one collegiate year, of which at least one-third shall be laboratory work; B. Physics as represented by a course of at least three actual hours per week for one-half collegiate year, of which at least one-third shall be laboratory work; C. Biology (Botany or Zoology or a combination of these), as represented by a course of at least three actual hours per week for one-half collegiate year, of which at least one-third shall be laboratory work; D. Latin of at least one year's work, as represented by Latin grammar and the reading of four books of Caesar, or equivalent.

Conditional entrance, however, may be granted to a student deficient in all of one of the requirements A, B, C and D, or in part of any two of them; but all such conditions shall be removed before the student shall be allowed to enter the second year class as a regular student.

At the present time the following medical colleges only have in force requirements for entrance equal to that of Western Reserve. In each case certain specific subject requirements are also enforced:

Johns Hopkins Medical School, degree; Harvard Medical School, degree (with exceptions by special faculty vote); Cornell Medical School, degree (or seniors in absentia and others, who show by examination that they are able "to profit by the instruction"); Medical Department, Western Reserve University, completion of junior year in a standard college.

## STATE EXAMINING BOARDS.

### September to December Reports.

#### CANDIDATES.

	Exam.	Passed.	Failed.
Arizona .....	8	5	3
Arkansas .....	30	18	12
California .....	62	34	28
Connecticut .....	20	15	5
Delaware .....	4	4	0
Florida .....	59	52	7
Georgia .....	32	30	2
Indiana .....	59	53	6
Iowa .....	33	26	7
Kentucky .....	43	19	24
Louisiana .....	21	13	8
Massachusetts .....	77	53	24
Michigan .....	13	9	4
Mississippi .....	101	31	70
Missouri .....	46	25	21
Montana .....	50	30	20
Nevada .....	6	6	0
Nebraska .....	18	16	2
New Hampshire .....	22	15	7
New Jersey .....	56	40	16
New Mexico .....	7	6	1
North Carolina .....	121	95	26
Oklahoma .....	44	34	10
Pennsylvania .....	80	69	11
Pennsylvania (June) ..	395	362	33
Rhode Island .....	13	9	4
South Dakota .....	35	32	3
Texas .....	60	59	1
West Virginia .....	31	28	3
Wyoming .....	1	1	0

## Editorials from Medical Journals

### PUBLIC POLICY AND THE MEDICAL PROFESSION.

(A summary of the editorial in the *New York State Journal of Medicine*.)

One important fact that the public should know is that no great work in process of development means more to the people than the advancement of medical science. If society were wise, it would not place obstacles in the path of this development, but would render it every aid. One of the greatest reflections on the ability of the people to take care of themselves is the fact that most medical and sanitary measures have been secured by the medical profession against strong popular opposition. Were it not that medical men have labored unceasingly for laws to prevent diseases, our cities would be riddled by pestilence. Frequently we lose, temporarily, and the public

can only be led ultimately by a slow process of education to revise its action and adopt the policy which medicine has advised. The medical profession is the only one whose relations to the public as a whole are for the public good. As an organized class, what is recommended by physicians for the public good has the merit of true philanthropy which no other profession or class approaches.

We are not striving for the acceptance of any particular scheme, theory or doctrine, nor laboring to fasten to the State any particular superstition, but are only aiming to learn all that can be learned about the laws of health and to apply them so that pain may be lessened, sickness prevented, physical efficiency promoted, and death prevented. Were society wise, it would give the men who are striving for these things every help. Unwisely, it does not. It makes laws to the prejudice of public health; it hinders the adoption of policies for the saving of lives. For instance, in every municipality where typhoid fever exists, the medical profession has advised the people what to do to stop it. Usually, they have pleaded with them. Have they ever advised the people wrongly? No. Has the public ever adopted their recommendations without a vast deal of palaver and delay, while the people kept on dying? No. Is it not a spectacle to be viewed with emotions of pity and shame that in every large community there are people dying who would be well and happy, were the recommendations of the medical profession acted on?

The editor of the *A. M. A. Journal*, in commenting upon the above, says:

This statement should be placed before every legislator, editor, minister, teacher and prominent citizen in the State. Similar editorials or official statements from the organized medical profession should be circulated in every State. The issue should be and must be plainly put before the public that the medical profession has no selfish object in preaching the gospel of health and the prevention of diseases; that modern science makes possible the absolute prevention of many diseases and the restriction of others. If the people refuse to avail themselves of the protection offered by co-operation with medical men, then the responsibility should be placed squarely where it belongs, on the people themselves.

### MEDICINE AND POLITICS.

Two recent incidents have shown the deplorable consequences of the encroachment of politics on the sphere of medicine. A physician in the customs service, having been elected councilor of arrondissement on a platform which was not acceptable to the administration, on September 21 received his dismissal from the customs, to date from October 1, on the ground that his political attitude had been judged incompatible with the functions of a physician of the customs. Medical opinion is agreed that this abrupt discharge of a physician from a position which he has held for years constitutes a violation of liberty of opinion altogether unworthy of a republican government. The syndicate of physicians in the neighborhood of the dismissed physician has decided unanimously that none of its members will accept the position.



The other instance is much more serious, for it implicates a physician. During the judicial proceedings in regard to the eacute or uprising of Villeneuve-Saint Georges, one of the counsel for the accused found among the documents in the case a letter from a hospital surgeon (who is also physician to the Ministry of the Interior), giving information against one of his patients as having been concerned in the disturbances. This fact has naturally aroused much feeling. The counsel for the accused are going to address to the Minister of Justice a protest demanding the prosecution of this physician for violation of professional secrecy. Moreover, two physicians have just addressed to the president of the syndicate of physicians of the Seine a letter suggesting that the syndicate notice "this glaring violation of professional secrecy under particularly revolting circumstances" by some severe measure, such as a public reprimand.—From Paris Letter in *A. M. A. Journal*.

### THE SUICIDE PROBLEM.

(From the *Wisconsin Medical Journal*, January, 1909.)

"Suicide while temporarily insane." This verdict of the coroner's jury, appearing so frequently in the daily press, has done much to produce and foster a spirit of indifference on the part of both lay and professional men to the fact that the number of suicides is increasing much faster than is justified by the increase in population. There are still many who accept the fallacy that suicide and insanity are inseparable. This statement never was correct and grows less tenable with the increasing refinement of our civilization. In short, insanity as defined by the law and as considered by the layman, has little to do with self-destruction. The mental state that permits an individual to take his own life is most unnatural, but this same individual may be absolutely sane from every standpoint. Self-analysis and careful reasoning in many instances has convinced the unfortunate that there is no other alternative, and the unjustifiable step is taken.

The alienist recognizes in the majority of suicides a class of individuals either insane or poorly balanced whom pressure of circumstances has reduced to despair, but the alienist also considers many causes for self-destruction other than insanity. During the past twenty years, in this country and Europe, the suicide rate has increased out of all proportion to the increase in the number of the insane. When we consider that more than 10,000 persons take their own lives in the United States every year; that more than 70,000 die annually by their own hands in Europe; and that the suicide rate is constantly and rapidly increasing throughout the greater part of the civilized world—we are forced to admit that from the viewpoint of vital economy at least, the subject is one of the utmost gravity. In 1881 the annual suicide rate of the United States was only 12 per million of the population, and our total number of suicides was 605; last year our suicide rate had risen to 126 per million and our suicides numbered 10,782. Suicide has cost the United States 120,000 lives since 1890.

It is hardly necessary to point out the practical importance of this subject. The natural question prompted by such startling facts is:

Is this abnormal and apparently unnecessary waste of life to continue and are there no measures to check it? The answer to this question must lie in the careful analysis of the various agencies conducive to self-destruction. The intensity of life and competition in all lines, the money-mad rush depriving the individual of time to consider nature and the objects of life, failure to develop the moral and spiritual sides of our natures, all tend toward the creating of false ideals, failures, and the despair that suggests death in preference to the struggle. The unmistakable tendency of the times is toward diminishing integration in government, church and society. The increasing consumption of alcoholic drinks causes lessened resistance of the present and succeeding generations—producing a large class of semi-responsible. The much vaunted liberty of the press exemplified in the scare headlines and prominence given suicides and their methods, is altogether too suggestive to certain poorly balanced brains; the ease with which poisonous drugs and firearms may be secured all tend to make easier the escape from trouble through the ever open door of suicide.

The medical profession, pledged to the preservation of human life, is apathetic while thousands of human fellow beings die yearly by their own hands. This problem has long since ceased to be one for the sociologist alone. It is just as essential to save men from themselves as from tuberculosis, small-pox or any other plague. The public clamor has become so great that the Salvation Army has opened clinics for these sufferers. The Emmanuel movement is for the same purpose, and now the Baptist churches of Chicago are holding "comfort meetings." It is high time that the medical profession took steps to recover lost ground and took up their work now assumed by the churches, Christian Scientists and the Salvation Army.

## Hospitals.

### Hospitals May Get Nichols Money

A solution of the Newark Hospital bequest has been devised by Edward M. Colie, of Newark, as special master in Chancery, and if the Chancellor approves, five hospitals will benefit by the residuary estate of Joseph Nichols. The hospitals are St. Barnabas's, German, St. Michael's, St. James's and Beth Israel.

The amount of money to be distributed is about \$25,000. The report makes application of the rarely used legal doctrine "cy pres," which means "the power of a court of equity to substitute for a particular charity which has failed another of the same kind as nearly as may be."

Mr. Nichols died July 1, 1866, and in his will devised all the residue of his estate to the Newark Hospital. The hospital suffered so much financially that it was abandoned before the bequest became available.

### Essex County Isolation Hospital Change.

Dr. John F. Condon, of Belleville, has resigned from the Essex County Isolation Hospital Commission because of his private practice. Mr. John T. Davis, of Orange, has also resigned from the same Board.

### Hospital for Advanced Cases of Tuberculosis.

A committee of one hundred and representatives of several Boards of Health of Essex County—all but Newark—and some societies have appealed to the Board of Freeholders of Essex County to establish a County Hospital for advanced tuberculosis at Soho as part of the Isolation Hospital there. This project has not met with the co-operation of the Newark Board of Health, which has at Verona an institution for curable cases, and a plan to use an isolated building at the City Hospital for advanced cases. The physicians of the county were recently personally addressed by the managers of the Isolation Hospital on the subject, and almost unanimously approved of some comprehensive plan for the care of advanced cases of tuberculosis, admittedly the most pressing need in public hygiene and preventive medicine at present discussed.

### Diphtheria in Mountainside Hospital, Montclair.

A mild outbreak of diphtheria in the Mountainside Hospital in Montclair, which involved nurses, orderlies and a few patients, necessitated the closing of the institution for a few days, to allow thorough and complete fumigation. It is now reopened and is again receiving patients.

About six weeks ago a child was admitted with a diagnosis of some nervous trouble. The attending physician at the hospital suspected the case to be one of post-diphtheritic paralysis, on his first examination. Smears were made and the nasal examination reported to be positive. The child was removed within twenty-four hours after admission.

The next case did not occur until two weeks later, but was probably due to this source of infection. Several additional cases developed rapidly, and then smears were made from the noses and throats of every patient, nurse and employee. Sixteen or seventeen positive cultures were reported in all, many of them nasal. Of this total, there were only four who showed clinical symptoms. The remainder were laboratory cases, without other symptoms.

M. J. S.

### Joint Committee Investigating Charges Against the Elizabeth General Hospital.

(From the *Newark Evening News*, Feb. 19, 1909)

Mrs. Emily E. Williamson did not appear yesterday at the investigation by a joint committee of her charges against the Elizabeth General Hospital. The committee, composed of representatives of the Board of Freeholders and of the board of managers of the hospital, had given her notice of the hearing. The investigation was set on foot after Mrs. Williamson had declared that people who were too poor to pay for treatment had been denied admission to the institution.

Mrs. Williamson acknowledged receipt of the notice and yesterday sent word that she would be in Trenton and could not attend the committee hearing in Elizabeth. The committee arranged to meet again on Thursday, February 25, to give Mrs. Williamson a chance to appear and

press her charge in person. Other persons who are alleged to have had experiences sustaining Mrs. Williamson's charges, will also be invited to attend next Thursday.

The hearing was conducted by Nathan R. Leavitt for the Board of Freeholders, and Frederick A. Faulks for the hospital.

Among the witnesses who testified for that institution were Dr. Victor Mravlag, Mayor of Elizabeth; City Physician Stein and Miss Adams, hospital clerk, and Assistant to Superintendent Austin F. Knowles.

Mayor Mravlag said he had been connected with the hospital since its foundation in 1879 and there was not a day since that time, unless ill, or away from the city, that he had not visited it. He had been there at all hours of the day and night and often all night. He was thoroughly familiar with its workings and never knew of a case during that period where a person unable to pay had been refused admission, unless the applicant had a contagious disease. Even then, he said, there were instances where such patients secured admission before the true nature of their malady was discovered.

Twice small-pox cases had been admitted in this way, and the hospital each time had to suffer a two weeks' quarantine.

"If persons desiring treatment can pay," declared Dr. Mravlag emphatically, "they should be made to do so. A hospital cannot be run on wind. All that it receives from the State, city and county would not pay one-third of its maintenance. No distinction ever is made in the reception of patients."

The Mayor asserted that seventy-five per cent. of the patients treated last year were "charity cases."

Miss Adams testified that she had been connected with the hospital for eight years and had served under three superintendents. She answered most of the telephone calls for ambulance service, and never knew a sick call to be refused, whether the patient could pay or not. She knew of several instances where persons who could pay refused to do so when they learned a patient in the next bed was being treated free. They would explain their refusal by asserting that they had as much right as other people to receive treatment gratuitously.

Freeholder Krouse, of Linden, said Dr. Pierson, of Roselle, told him that he did not want to call an ambulance from the hospital for a charity patient, because such would not be taken. Dr. Pierson will be invited to attend the next hearing and explain. Freeholder Woodruff, of Union Township, said the opinion seemed prevalent there that no indigent patient would be taken in the hospital.

George A. Henshaw, overseer of poor for Roselle Borough, said he sent Thomas Morris, a pauper, to the hospital for treatment. The man spent twenty-six days there. The borough afterward received a bill from the hospital for \$26. It was not paid.

Miss Adams stated when bills were sent where it was thought some payment should be made, if no money was received the charge was canceled on the ledger and an entry made "treated free."

Freeholder Jensen, of Elizabeth, said he could bring persons to testify that because they had no money they were refused admission to the hospital. He promised to have them on hand



next week, when the assailants of the institution will have a chance to state their grievances.

From the *Elizabeth Journal*, March 5, 1909.

The Special Committee of the Board of Freeholders of Union County after completing the investigation presented the following report, which we take from the *Elizabeth Journal* of March 5th:

To the Board of Chosen Freeholders of the County of Union:

The undersigned, the special committee to whom was referred the communication of Mrs. Emily E. Williamson under date of February 3, 1909, respecting the admission of patients to the Elizabeth General Hospital and manner of making appropriations by this board for hospital purposes, etc., beg to report:

1. That the reports of this board show that there was appropriated by this board for hospital purposes for the year 1908 the sum of \$20,000, which was divided between the hospitals of Elizabeth and Plainfield—Elizabeth, \$14,750, and Plainfield, \$5,250—that the amount appropriated for the Elizabeth hospitals was divided as follows: Elizabeth General Hospital, \$8,000; St. Elizabeth Hospital, \$3,750, and Alexian Brothers' Hospital, \$3,000.

2. We find that all these hospitals are also supported, in addition to the money appropriated by the county, by the respective cities in which said hospitals are located and by private subscription.

3. We found that a large proportion of the patients who receive treatment in the various hospitals were indigent patients who are unable to pay the expense of such treatment. So far as we have been able to learn, such patients as are treated at the various hospitals who are able to pay are required and do pay for the same.

4. Prior to the receipt of the communication of Mrs. Williamson respecting the difficulty of securing admission of indigent patients to the Elizabeth General Hospital occasional rumors have come to this board intimating and suggesting that there was difficulty in getting patients admitted to the Elizabeth General Hospital unless pay for their treatment was guaranteed from some source. Your committee therefore thought it wise to make a further investigation regarding the matters in connection with it, and accordingly, this committee has had two sittings, to which all parties having cause for complaint and the hospital board were invited. These hearings were attended by many, and this committee was represented by the County Attorney and the hospital board by F. J. Faulks.

We have not gone into the form of a trial, but the statements of those who appeared before the board were taken without oath and a stenographic report of such report made, which stenographic report is hereto attached and made a part of this report.

We find that in cases coming from municipalities outside of the city of Elizabeth it has been the custom of the hospital authorities to insist upon a guarantee from the poormaster from the municipality wherein the indigent patient resides to pay for treatment given to such indigent

patient and that these poormasters were in the habit of paying for such treatment. We feel that this should not be. We believe that the hospital authorities should treat indigent patients without regard to what municipality they come from, if residing in this county, without being paid for by the poormaster of that municipality. We also found that the impression did exist that it was difficult to secure the admission of indigent patients into the Elizabeth General Hospital who could not afford to pay, but your committee hopes that, thanks to Mrs. Williamson's letter which caused this investigation, this impression is now dispelled.

We believe that patients who are able to pay should be required to pay, but no persons, in our opinion, should be denied the benefit of the hospital for the reason that they are unable to pay.

Some of the complaints brought to the attention of this committee, upon investigation, were in the opinion of your committee, groundless. We believe that the Board of Governors of the Elizabeth General Hospital are gentlemen given to conducting the affairs of the institution in a proper and public-spirited manner and are doing noble work, and your committee is of the opinion that the cause for the impression relative to the admission of indigent patients has occurred largely, perhaps, through overzealous employees at the hospital seeking to guard against imposition rather than through any intent on the part of the hospital authorities to refuse admission to the deserving poor.

Your committee feel that all patients claiming to be poor should be admitted upon application, and any investigation as to financial condition of the patient should be made after such admission.

Your committee beg to recommend that inasmuch as the county of Union is appropriating a large sum of money toward the support of the various hospitals throughout the county, with a probable increase in the near future, it would be advisable for the Director of this board to appoint a special committee of five members to visit the various hospitals to the support of which moneys are appropriated by this board, at various times as, in their opinion, may be required and to whom all complaints against hospitals should be made, and who shall investigate such complaint and report to this board; and further that it be understood between this board and the hospitals to which this board contributes funds that patients residing outside of the City of Elizabeth, but residents of this county only, be admitted without their treatment being paid for by the overseers of the poor of the municipalities where such patients reside, unless the municipalities in their discretion, desire to pay for their indigent patients, which they are allowed to do by law.

We further find that the sum appropriated by this county to hospitals is placed in the general fund by the hospital authorities for their support; that the cost of maintaining county patients is not charged directly to this fund.

Your committee further recommend that a copy of this report be sent to Mrs. Emily E. Williamson with the thanks of the board for her interest in the county poor patients and to the Elizabeth General Hospital and to other hospitals in the county to whom this county contributes funds.

Henry Krouse, W. H. Garrison, N. R. Leavitt, Committee.

The Freeholders appointed a committee to visit the various hospitals, to which appropriations were made and to investigate complaints made against the hospitals.

### AN ACT TO REGULATE THE PRACTICE OF MIDWIFERY IN THE STATE OF NEW JERSEY.

This Act was introduced by Senator Frelinghuysen, in the Senate, February 9, 1909.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Every person hereafter beginning the practice of midwifery in the State shall apply to the State Board of Medical Examiners of New Jersey for examination and license so to do.

2. Candidates for examination shall present to the secretary of the said board, at least ten days before the commencement of said examination, a written application on a form or forms provided by said board, setting forth, under affidavit, the name, age, nativity, residence, moral character and period of study of the candidates; that the candidate has received a certificate or diploma from a legally incorporated school of midwifery (which in the opinion of said board was in good standing at the time of issuing said certificate or diploma), granted after two courses of instruction of at least seven months each in different calendar years prior to the granting of said certificate or diploma; or a certificate or diploma from a foreign institution of midwifery of equal requirements and approved by said board, conferring the full right to practice midwifery in the country in which it was issued.

The application must bear the seal of the institution from which the applicant was graduated. Foreign graduates must present with the application a translation of said foreign certificate or diploma made by and under the seal of the consulate of the country in which said certificate or diploma was issued. All applications must be endorsed by a registered physician of New Jersey.

3. If the application is approved and the candidate shall have deposited the sum of fifteen dollars, as an examination fee, with the secretary of said board, the candidate shall be admitted to the examination, and, in case of failure to pass the examinations, ten dollars of the fee shall be returned to the candidate. The same conditions shall apply to subsequent examinations of the same candidate.

4. The State Board of Medical Examiners are hereby authorized and empowered to execute the provisions of this act, and shall hold examinations in midwifery in the Capitol Building, Trenton, New Jersey, on the Third Tuesday in June and October, from ten A. M. to six P. M., or such other times as said board may deem expedient. The examinations shall be written and in the English language. The examinations shall be in the following subjects, namely:

1—Anatomy of the female pelvis and the female generative organs; physiology; 2—Diagnosis and management of pregnancy; 3—Diag-

nosis of foetal presentation and position; 4—Mechanism and management of normal labor; 5—Management of the puerperium; 6—Injuries to the genital organs following labor; 7—Sepsis and antisepsis in relation to labor; 8—Special care of the bed and lying-in-room; 9—Hygiene of the mother and infant, and 10—Asphyxiation, convulsions, malformation and infectious diseases of the new born; cause and effects of ophthalmia. II.—Abnormal condition requiring the attendance of a physician.

Said examination shall be of sufficient severity to test the scientific and practical fitness of candidates to practice midwifery, and said board may require examination in other subjects relating to midwifery from time to time. If said examination is satisfactory, said board shall issue a license with a certified copy signed by its president and secretary and attested by its seal, entitling the candidate to practice midwifery in the State of New Jersey. The certificate of license or the certified copy thereof must be filed in the office of the clerk of the county in which a licentiate resides, or removes to, and said clerk shall enter a memorandum thereof in a book kept for this purpose, giving name of licentiate, date and number of license and of registration, and said clerk shall be entitled to a fee of one dollar. All application papers shall be deposited in the State Library at Trenton, and their contents recorded in the official register of the board kept for this purpose, and they shall be prima facie evidence of all matters therein contained.

5. All midwives shall always secure the immediate services of a reputable, registered physician wherever any abnormal or irregular signs or symptoms appear in either the mother or infant.

6. Said board may refuse to grant, or may revoke a license for any of the following causes, namely: Persistent inebriety, the practice of criminal abortion, crimes involving moral turpitude, presentation of a certificate or diploma for registration or license illegally obtained, application for examination made under fraudulent representation, neglect or refusal to make proper returns to the health officers or health department of births to a puerperal, contagious or infectious disease, within the legal limit of time. Failure to file a State license or a certified copy thereof with the clerk of the county in which the licentiate resides or practices. Failure to secure the attendance of a reputable physician in case of miscarriage, hemorrhage, abnormal presentation or position, retained placenta, convulsions, prolapse of the cord, fever during parturient stage or inflammation or discharge from the eyes of the new-born infant, or whenever any abnormal, irregular or unhealthy symptoms appear in either the mother or infant during labor or the puerperium.

In complaints of violation of the provisions of this section the accused shall be furnished with a copy of the complaint and given a hearing before said board in person or by attorney, and any midwife refused admittance to the examination or whose license has been revoked, who shall attempt or continue the practice of midwifery, shall be subject to the penalties hereafter prescribed.

7. Any person shall be regarded as practic-



ing midwifery within the meaning of this act who shall attend a woman in childbirth as a midwife, or advertise as such, by signs, printed cards or otherwise, but nothing shall be construed in this act to prohibit gratuitous service in case of emergency, nor the service of any legally qualified physician or surgeon of this State.

8. Any person practicing midwifery in this State without first complying with the provisions of this act, shall be guilty of a misdemeanor, and shall be punished by a fine of not less than ten nor more than fifty dollars, or by imprisonment in the county jail for not less than ten nor more than thirty days, or by both, at the discretion of the court.

9. The expenses of said board for the examination and licensing of candidates in midwifery shall be paid from the license fees above provided for, and if any surplus remains, the same may be distributed among the members of said board as compensation for their services; otherwise they shall receive no compensation whatever.

10. All acts or parts of acts inconsistent with the provisions of this act be and the same are hereby repealed.

11. This act shall take effect immediately.

## Obituaries.

BREWER.—At Vineland, N. J., March 4, 1909, Dr. Charles Brewer, aged 77 years. He graduated from the University of Maryland, Baltimore, 1855; from 1858 to the outbreak of the Civil War he was a member of the medical corps of the Army, and during the war a surgeon in the Confederate service; postmaster of Vineland, N. J., under President Cleveland; and resident physician at the State Prison, Trenton, from 1891 to 1896.

FARROW.—At Hackettstown, N. J., March 21, 1909, Dr. Levi Farrow, after a few weeks' illness from acute Bright's disease, following illness from an internal abscess, in the 65th year of his age. He graduated from the College of Physicians and Surgeons, New York City, in 1865. Commenced the practice of medicine at Middle Valley, Morris County, where he remained for thirty-four years.

Nine years ago Dr. Farrow removed to Hackettstown and opened an office in the house where his death occurred. For twenty-five years he was the secretary of the Morris County Medical Society, and was also a former president of the Tri-County Medical Society of Morris, Sussex and Warren counties, each of which fraternities was represented at the funeral and sent floral offerings.

Dr. Farrow was an elder of the First Presbyterian Church of this place, and his colleagues of the board were the pall-bearers. He was also for several years treasurer of the Warren County Bible Society. In politics, Dr. Farrow was a Prohibitionist, and had been honored by the nomination for offices on the county and municipal tickets of that party. His wife, who was Miss Alice Trimmer, died January 10, 1892, aged forty-one years. Four sons have also died, John W., in 1874; Charles A., in 1881; Dr.

Joseph R. S., in 1898, and Dr. Frank P., in 1907.

FORMAN.—At Freehold, N. J., March 29th, 1909, Dr. D. McLean Forman, aged 64 years. News came after Journal was ready for the press; fuller account will appear in the May issue.

GRAY.—At Summit, N. J., January 22, 1909, John Walter Gray, M. D. (See February Journal, Page 492.)

At a meeting of the Summit Medical Society, held January 27th, 1909, the following resolution in memory of Dr. J. Walter Gray was adopted:

Whereas, God, in His inscrutable wisdom has called to his eternal rest our brother and fellow-physician, Dr. J. Walter Gray, in the flower of his manhood, and in the midst of an active professional career; and,

Whereas, His unceasing devotion to suffering humanity has not only endeared him to all who knew him, but was the direct cause of hastening his early death; and,

Whereas, We, the members of the Summit Medical Society, who had worked with him and loved him, esteemed him as an honorable, charitable and brilliant physician, ever ready to give his time and strength to those who needed his services; and,

Whereas, His personal character was so sympathetic, loyal and genial that he was a warm personal friend of each one of us; therefore, be it

Resolved, That we desire to express to the members of his family our great grief and our sense of personal loss in the death of our beloved brother, and our appreciation of a life of cheerful optimism, genial comradeship and untiring professional zeal; and be it further

Resolved, That a copy of these resolutions be spread upon the minutes of the society.

## BOOK REVIEWS.

Hemorrhage and Transfusion, An Experimental and Clinical Research, by George W. Crile, A. M., M. D., Professor of Clinical Surgery, Western Medical College; Visiting Surgeon to Lakeside Hospital, Cleveland, Ohio. New York and London, D. Appleton & Co., 1909.

This is one of the remarkable books of the day. It is not a compilation of the work and thoughts of others, but a detailed statement of the author's experiments and his own deductions therefrom. It is a fitting introduction to a new era in surgery and the surgical treatment of the disease. No surgeon, who desires to keep abreast of the times can fail to read and carefully study these detailed experiments in variously prolonged hemorrhages, their effects, their modification by transfusion and their suggestive thought as to the treatment of numerous serious and hitherto fatal maladies. The chapters on the suture and canula methods of direct transfusion of blood and on the clinical applications of transfusion in pernicious anaemia, leukemia, sarcoma, carcinoma, goiter, tuberculosis, shock, hemorrhage, gas poisoning, etc., deserves most attentive reading. We fully endorse the conclusion of the author that, "judiciously employed, transfusion will surely prove a valuable, often lifesaving resource; injudiciously employed, it will surely become discredited."

## Personals.

**Dr. Robert H. Hammill**, of Summit, has returned from Hot Springs, Va., restored to health and has resumed practice.

**Drs. W. J. Lamson, T. H. Rockwell and John Burling**, of Summit, presented papers at the meeting of the Summit Medical Society, March 26th, as a part of the symposium on tuberculosis.

**Dr. D. J. M. Miller**, of Atlantic City, read a paper on Poisoning by Egg, at the Atlantic County Society meeting, December 18 1908, which appeared in the Medical Record, March 13, 1909.

**Dr. Joseph E. Pollard**, of Chatham, has retired from general practice and taken a medical position with the Prudential Insurance Co.

**Dr. C. M. Slack**, of New Brunswick, has returned, with his wife from a two weeks' sojourn in Florida.

**Dr. J. Harris Underwood**, of Woodbury, we regret to learn is suffering from a Colles' fracture of the right wrist, received while cranking his automobile.

**Dr. Howard C. Voorhees**, of New Brunswick, has been appointed a member of the medical staff of the Wells Memorial Hospital.

### DEPARTMENT OF PUBLIC HEALTH FOR CUBA.

Now that the medical profession in the United States has decided that a department of public health in some form is necessary, and is struggling with the various propositions under discussion, uncertain whether it shall take the form of a neoplasm in the interior, or an elephantiasis in the treasury, or a new baby in the Cabinet, it is interesting to know that the young Cuban republic, having been safely nursed through its recent attack of eruptive fever, comes out with a fully developed executive department of public health. Among the eight secretaries who will compose the cabinet of the newly elected president, according to a decree recently signed by the provincial governor, is the Secretary of Sanitation and Charities, or Sanidad y Beneficencia, to use the official Spanish title.

The new law provides that the department shall consist of the two sub-departments (called direcciones) of sanitation and charities, at the head of each of which is a director, and of the National Board of Sanitation and Charities.

The National Board of Sanitation and Charities is composed of twelve members, most of them ex officio in character. They are the director of sanitation, director of charities, the chief of the quarantine service, the president of the board of diagnosis of contagious diseases, the president of the commission of special hygiene, the president of the antituberculosis league, the dean of the medical faculty of the University of Havana, the president of the economic association, and four other members selected by the president, among whom must be one lawyer and one engineer. The duties of the board are mainly advisory in character. It makes studies of sanitary projects and laws and renders expert reports thereon for the information of the secretary and advises him of the effects of sanitary legislation; it hears complaints and peti-

tions of a general character referring to sanitary and charitable matters. It is also charged with the investigation of abuses committed in charitable institutions and complaints against the officials thereof, and for the purposes of such investigations, has the power to administer oaths, call witnesses and demand the production of books and papers. Members of this board receive a fee of \$15 for each meeting attended by them, provided the total of such fees does not exceed \$90 in any one month.

**Dr. Nicolas Alberdi** has been selected by President-elect Gomez to be the first secretary of the new department, and for the director of sanitation has been chosen **Dr. Juan Guiteras**, the distinguished yellow-fever expert, whose name is so well known to the medical profession in the United States. The department has a well-trained personnel, and if it can be kept out of the domain of Cuban politics we shall have every reason to expect a continuation of the present highly efficient administration which has made Cuba cease to be a dangerous neighbor.—From the Cuban Letter, *A. M. A. Journal*

### BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

#### Monthly Statement of Mortality, Feb., 1909.

The number of deaths reported to the Bureau of Vital Statistics for the month ending February 15, 1909, was 3,277, a decrease of 251 from the corresponding period last year. Diseases of the respiratory system, which constitute the leading causes of death at this season of the year, show a gratifying decrease in number. This in a measure is probably due to the mild weather of the past few weeks, although it is believed that the campaign against tuberculosis being waged throughout New Jersey, which has been the means of teaching persons to sleep in well ventilated rooms, and to live more in the pure air and sunlight, may have also contributed to this reduction of mortality.

The following table shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending February 15, 1909, compared with the average for the previous twelve months, the latter being in parentheses:

Typhoid fever, 25 (31); measles, 36 (16); scarlet fever, 39 (32); whooping cough, 18 (20); diphtheria 60 (46); malarial fever, 1 (2); tuberculosis of lungs, 304 (300); tuberculosis of other organs, 51 (51); cancer, 127 (130); cerebro spinal meningitis, 28 (25); diseases of nervous system, 416 (350); diseases of circulatory system, 390 (323); diseases of respiratory system, (pneumonia and tuberculosis excepted), 273 (175); pneumonia, 388 (243); infantile diarrhoea, 70 (219); diseases of digestive system, (infantile diarrhoea excepted), 188 (192); Bright's disease, 248 (194); suicide, 35 (37); all other diseases or causes of death, 580 (597).

#### Laboratory of Hygiene, Division of Food and Drugs.

During the month ending February 28, 1909, 624 samples of food and drugs were examined



in the State Laboratory of Hygiene, as follows:

The following were found below the standard: Milk, 8 of the 240 samples; butter, 9 of the 36; all 3 powdered chocolate; spices, 6 of the 230; cocoa, 1 of the 3; lemon extract, 13 of the 18; cider vinegar, 5 of the 27; lime water, 1 of the 2, and tincture iodine, 1 of the 3 samples. Twelve suits have been entered. The following articles were all samples above standard: Honey, molasses, oleomargarine, olive oil, sausage, syrup, alcohol, borax, cream tartar and witch hazel.

During the month ending February 28, 1909, 79 inspections were made in 50 cities and towns.

The following articles were inspected during the month, but no samples were taken: Milk, 375; butter, 459; foods, 1,320; drugs, 304. Other inspections were made as follows: Milk cans 556; milk wagons, 246; milk depots, 49; grocery stores, 446; drug stores, 40.

### Laboratory of Hygiene—Bacteriological Department. Specimens for Bacteriological Diagnosis.

Number of specimens examined from suspected cases of diphtheria, 5,028; tuberculosis, 378; typhoid fever, 145; malaria, 10; miscellaneous, 20; total, 5,581.

### Division of Creameries and Dairies.

Creameries—Total number of creameries inspected 8. Location: Baleville, 2; Belle Meade, Branchville, 2; Chester, 2; Flemington.

Dairies—Total number of dairies inspected, 110. Location, number inspected and disposal of product as follows:

Burlington County—Burlington Township, 8, Burlington; Chester Township, 1, Riverton; Chesterfield Township, 1, Riverton; Florence Township, 3, Burlington; Mansfield Township, 2, Burlington and Riverton; Springfield Township, 8, Burlington and Riverton; Westhampton Township, 3, Burlington; Willingboro Township, 2, Burlington and Riverton.

Essex County—Livingston Township, 1, Orange; Orange City, 1, Orange; Orange Township, 5, Orange.

Hunterdon County—Alexandria Township, 2, Jutland Creamery; Bethlehem Township, 3, Jutland Creamery; Raritan Township, 18, Flemington Creamery; Radington Township, 6, Flemington Creamery; Union Township, 22, Jutland Creamery.

Mercer County—Hamilton Township, 1, Trenton; Hopewell Township, 3, Hopewell; Princeton Township, 1, Princeton.

Morris County—Chester Township, 10, Newark Creamery; Washington Township, 2, Orange.

Somerset County—Montgomery Township, 1, Belle Meade Creamery.

Union County—Linden Township, 1, Roselle; Union Township, 1, Roselle.

Warren County—Mansfield Township, 4, Orange.

Number of samples of water taken from dairy premises, 50; creamery premises, 4.

### Division Sewerage and Water Supplies.

Total number of samples analyzed in the

laboratory, 129. Public water supplies, 39; dairy supplies, 50; sewage samples, 17; private wells, 14; creamery supplies, 4; miscellaneous, 5.

### Inspections.

Public water supplies inspected at Riverton, Palmyra, Bound Brook, Bridgeton, Wenonah.

Sewage disposal plants inspected at Jamesburg, Freehold, Princeton, Woodstown, Lawrenceville, Flemington, Asyla, Overbrook, Pemberton, Haddonfield, Westfield, Collingswood.

Cases of special pollution investigated at Clinton, Dover, Bernardsville, Rahway, Bridgeton. Ice pond inspected at Westwood.

Stream inspection continuing on Delaware, Rockaway, Raritan and Shrewsbury rivers and tributaries.

Number of persons summoned before the board, 8.

### STATISTICAL FALLACIES.

One of the most common of the statistical fallacies arises from the failure to consider the problem of age in its relation to mortality and morbidity. The well-known studies of Reinke tended to show that the death rate from tuberculosis was diminished, and the duration of disease increased, with the increase of income, within certain limits. While Reinke's main conclusions were undoubtedly correct, his figures need revision, as he took no account of the factor of age in his calculations. As is well known, income increases proportionately with age. Tuberculosis, on the other hand, diminishes in severity and frequency as age increases, and a large part of the favorable influence which Reinke ascribed to increased income was doubtless really due to increased age.—*American Journal of Public Hygiene*.

### LATE ITEMS.

News comes as the Journal goes to press of the death of Dr. J. Orlando White, of Camden, N. J.

Dr. E. J. Marsh, chairman of the Committee on Scientific Work, would like to have one or two more able papers for our Annual Meeting program. A preliminary program will appear in our next issue.

An urgent appeal is made by our Committee on Legislation to the members of our Society to bring all possible pressure to bear upon our Senators and Assemblymen to vote for the bills approved by our Society. Let us be careful to impress upon them the FACT that we are working thus earnestly not for our own interests as medical men, but because the health interests of our State demand it.

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## LABORATORY WORK IN PHYSIOLOGY IN RELATION TO MEDICAL PRACTICE\*

By **Haven Emerson, A. M., M. D.,**

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From time immemorial medicine and surgery have been taught by a combination of two methods—didactic and clinical. There have been courses of lectures by skillful lecturers or skilled physicians, or both; there has been teaching in the clinic and at the bedside in the hospital. These methods have produced skillful internists and able surgeons.

It is a bold man who will suggest an addition to the present crowded curriculum of our medical schools, and yet sometimes what appears to be an addition may save the time of the student. I am inclined to believe that a judicious use of what are properly described as physiological experiments or demonstrations in experimental medicine or surgery, might be introduced into the courses of medical and surgical lectures, with the object of showing, under conditions of exact control, various of the typical disease processes which are met in practice. The value of adding the quantitative method of study, and of observing disease processes with precise laboratory instruments, should prove invaluable in avoiding careless methods of diag-

nosis and in the recording of clinical cases.

There have been developed within the last four years in various laboratories in this country and abroad, a variety of procedures which so clearly duplicate clinical entities that they are now available for exact demonstration, and I believe will prove invaluable in teaching the essentials of diagnosis and treatment. May I ask your attention to a few of the more striking of these studies in experimental medicine and surgery?

First—Intra-cranial pressure.

A few years ago Professor Harvey Cushing, in the Hunterian Laboratory of Johns Hopkins University, duplicated the clinical symptoms of intra-cranial pressure, and gave such clear experimental proof of the inevitable results of its progress, as to make it immediately available for teaching. At first it was offered in a course to graduates at the College of Physicians and Surgeons, then it was given as a demonstration in physiology, and now it forms an integral part of the laboratory work of medical students at the College of Physicians and Surgeons.

Let me sketch for you the picture it presents: A properly anaesthetized dog has a trephine hole made through the parietal portion of his skull, into which a cannula is fitted exactly, and connected with a flask of normal salt solution. This flask is connected with a pressure pump so that the salt solution can be forced into the brain cavity of the dog at any desired pressure. A manometer to record the pressure which is exerted is arranged to write upon a smoked drum. Another mercury manometer of the usual recording type is arranged to write upon the same drum to record the blood pres-

\*Read for Dr. Emerson, by Dr. T. B. Barringer, of New York, Tuesday, February 16, 1909, at a meeting of the Essex County Medical Society, Newark, N. J.



sure in the carotid artery. The respiration rate is also traced by the use of an intra-pleural canula and recording tambour, and there may be added for the convenience of studying the pulse pressure, a Hurthle membrane manometer. The time is recorded in one-fifth of a second, and the base line from which the pressure records are taken is also placed upon the drum. We have then recording at the same instant upon the drum the rate of the heart action, the maximum blood pressure, the difference between the systolic and diastolic pressure in the pulse, the respiration rate and the pressure in the cranial cavity. After making a normal record, the pressure in the cranial cavity is raised, and at once, or shortly, the carotid pressure is seen to rise in order to maintain the capillary circulation in the brain against the increased intra-cranial pressure. As the intra-cranial pressure approaches the pressure in the carotid artery, the systemic blood pressure is seen to rise again. This procedure can be seen to repeat itself until finally we have a pressure of perhaps 300, or in some instances 315 mm. of mercury in the carotid artery, when the normal pressure in the animal would be 120 to 140 mm.

This tremendous rise is, of course, accomplished chiefly by extreme contraction of the arteries of the body, especially of the splanchnic area, and by some increase in the cardiac out-put. Then if the intra-cranial pressure is still maintained we find that the blood pressure will drop for a moment or two below the intra-cranial pressure. Immediately the respirations cease, Asphyxiation which ensues causes a still further rise of blood pressure, and the respirations are resumed. Thus we will find a typical Cheyne-Stokes phenomenon resulting from the struggle between the intra-cranial and vascular pressures. Finally the blood pressure falls for longer and longer periods. The vascular contraction is unable to maintain the pressure. There are longer periods of apnea, and finally there is a progressive fall in blood pressure and death. Thus within the course of two hours can be epitomized a case of increasing unrelieved intra-cranial pressure, as from hemorrhage, with the progressive rise of blood pressure, the interference of respiration, the coma, failing circulation and death.

Lumbar puncture will often relieve the intra-cranial pressure so successfully un-

der experimental conditions that the animal's life can be saved for a long time, in spite of the attempt to cause severe cerebral anaemia. Surgeons and physicians are continually coming in contact with operable or inoperable cases of increased intra-cranial pressure. The experimental study by such a procedure as I have just described, has brought it home to all that the blood pressure is a safe guide and an invariable warning to the physician or surgeon, of the severity of the condition within the cranial cavity. A case of progressing intra-cranial pressure will invariably show a coincident progressive rise of blood pressure. If, after a prolonged period of gradual rise in pressure, the pressure suddenly begins to fall, with periods of irregular respiration, it is a warning that the circulation can no longer stand the strain put upon it, and unless intra-cranial pressure is relieved, death will inevitably result. If, on the other hand, after a period of progressively rising blood pressure, the pressure comes to a stand still and then, together with an absence of severe respiratory symptoms and a persistently regular pulse, the pressure begins to fall, one can be assured that the intra-cranial pressure is for the time being on the decrease.

A still further experimental procedure in this connection is made by inserting under aseptic precautions beneath the bone of the skull, through a small trephine opening, a small wad of Bernay sponge. The intra-cranial fluids cause the compressed cotton to swell and exert pressure locally. In the course of twenty-four or thirty-six hours choked disc can usually be detected.

I believe Dr. Cushing has found that with skillful ophthalmological assistance he can be even better warned against the serious intra-cranial conditions than by the study of the blood pressure, and yet he tells me that in every case of intra-cranial pressure he has records taken every fifteen minutes to half an hour, as long as acute symptoms persist. So far as I have found no artificial means at our disposal, either by drugs or electric stimulation, are so effective in raising blood pressure as cerebral anaemia, resulting as it does in the general vaso constriction which so promptly succeeds in relieving the anaemia.

Of more direct interest to the internist than to the surgeon is the study of results of excessive peripheral resistance. Pro-

fessor Leo Loeb at the University of Pennsylvania, exhibited to his students the results of massive doses of adrenalin to rabbits. He found that if 2cc. of the 1-1000 adrenalin solution were injected into the ear vein of the rabbit, the animal would pass promptly through a stage of rapid, forcible breathing, then general relaxation, and finally die from oedema of the lungs, with a profuse pink froth appearing through the upper respiratory passages. If the procedure is modified for the sake of longer observation, we may follow it somewhat in this way. A cat, under ether, is connected by a carotid canula to a manometer, and the respirations are usually recorded at the same time. Adrenalin is then injected into the external jugular vein for convenience, and the pressure, as one might expect, rises rapidly.

After the first few injections the pressure falls fairly promptly, but after six or eight injections the vessels appear to be tonically contracted and the blood pressure remains at a considerable height, often over 200 or 250 mm., the normal pressure in the cat being about 120 mm. If now the use of the adrenalin is persisted in you will presently hear all over the chest coarse moist rales. We will find that the heart is beating somewhat irregularly, and if we notice minutely we will usually find a soft systolic murmur heard over the heart. These signs can easily be explained as due to a cardiac insufficiency, which in its turn is due to excessive peripheral resistance.

We have succeeded in causing so much pressure by our contracted arteries that the left ventricle has been unable to maintain the competence of the valves, a mitral insufficiency has developed, with consequent flooding of the pulmonary vessels and ultimately a failure of the right heart. If now further injections of adrenalin are given, each injection results in a fall of pressure instead of a rise of pressure, showing that further arterial constriction acts as an over-load to an already failing heart, and a drop of pressure results from what would under normal conditions give us a rise of pressure.

The lessons to be taught from this in medical practice are unusually numerous, it seems to me. The need of protecting a heart with a valvular or muscular defect from any considerable increase of resistance, whether this be brought about by exercise, excitement, the use of tobacco or

over-eating, must be apparent to anyone. In addition to that the failure of therapeutic means directed to improving the circulation by cardiac stimulations or vaso constriction under such conditions is well illustrated. Adrenalin as a circulatory stimulant is as valuable when we are dealing with conditions of relaxed vessels and low blood pressure, as it is harmful when circulatory failure is the result of already excessively contracted arteries.

If an excessively high pressure is due to walking up hill against the wind after a heavy meal, while the middle aged bon vivant smokes a strong cigar, we must rather try to depress his arterial tone than to over drive his heart. If the patient with acute mania in whom we have short periods of tremendously high pressure is to avoid serious circulatory results from the psychical stimulation, we must use arterial dilators.

If we take another animal which has undergone under ether the same procedure as the one just described, and open the chest and carry out artificial respiration, we will have the opportunity of seeing acute cardiac failure under conditions most perfectly adapted for exact observation. We shall see the left ventricle swell with the work put upon it as the arteries contract. We shall hear the tremendous accentuation of the second aortic sound with the first few injections of adrenalin. Then if the doses are increased in strength and rapidity, we find suddenly a period of mitral regurgitant murmur, and soon after distention of the right ventricle and auricle. If now further dosing is withheld, and the artificial respiration is continued, we shall find that the left ventricle presently resumes its normal size, the apex of the heart again becomes sharp pointed, the valvular murmur disappears, and finally the engorgement of the right side of the heart subsides and the heart action resumes its quiet rhythm.

The opportunity of watching a series of phenomena of this kind is to my mind, a valuable aid in the comprehension of a large proportion of the cardiac failures which we see under clinical conditions. It has seemed to me in some of the animals I have experimented on in this way, with the chest cavity closed, that when we had established a well marked oedema of the lungs and ample signs of cardiac failure, the use of artificial respiration certainly was the determining factor in the recovery of the circulation, and there is good theor-



etical support for such a result. As you know, under normal conditions each inspiratory effort allows the blood more readily to enter the thorax, and during expiration the elastic recoil of the lungs empties rather rapidly a large amount of blood out of the pulmonary vessels. If we have then a condition where the right heart is unable to pump the blood with sufficient force through the pulmonary vessels to prevent the blood from accumulating by regurgitation from the left side, and we then force air under positive pressure into the pulmonary vesicles, we are going to assist the passage of blood between the right side of the heart and the left side. In other words, if we add to the failing and irregular action of the heart, the rythmical pressure and release from pressure of artificial respiration, we ought to obtain a greater emptying of the pulmonary vessels at each respiration, and a relief from the purely mechanical results of the acute congestion of the lungs. At least there does seem so definite a result in each instance in which I have tried it, that I believe artificial respiration in acute oedema of the lungs, even without respiratory pump or other mechanical appliances, would be of value in the treatment of pulmonary oedema due to circulatory failure.

A whole series of profitable studies of valvular defects of the heart have been incorporated in a course of experimental pathology, by Professor McCallum of Baltimore. I will briefly indicate the procedures and results to be expected from some of them.

By exposing the heart in an anesthetized dog, and using manometers to test the conditions of the blood pressure in the heart cavities and the blood vessels of the body we are in a position to see the immediate results of interference with the valves of the heart.

Stenosis of the aortic, pulmonary and mitral valves is usually accomplished by the use of ligatures or clamps. In our aortic stenosis we get a low blood pressure in the arteries and a high pressure in the left ventricle, and if the stenosis is extreme or persisted in for a long time, ventricular failure, mitral regurgitation and rise of pressure in the pulmonary vessels will result. Typical systolic murmur in the aortic area is usually detected, direction of its transmission susceptible of study even out to the small arteries of the extremities.

Mitral stenosis with its pre-systolic murmur and its thrill, causes, unless it is of

very slight degree, an immediate distension of the pulmonary vessels and an engorgement of the right heart.

Regurgitation of blood in the valves can be produced by passing hooked knives on slender handles down through the carotid artery to reach the aortic and mitral valves, the valves being cut on withdrawing the knife, or down the external jugular vein if it is desired to interfere with the tricuspid valve.

Valvular defects of this type have been made, under aseptic precautions, and animals kept for study for long periods, and I am assured by Professor Thayer of Baltimore that they are useful aids in the teaching of the intricate subject of valvular murmurs to the student of physical diagnosis.

To continue with the various means of producing cardiac insufficiency which may resemble the insufficiencies which we meet with in practice, let me describe briefly the means of producing myo-cardial changes and experimental pericarditis. While the cause of cardiac failure in the experiment in intra-cranial pressure and in excessive peripheral resistance as in the use of adrenalin, is essentially a valvular failure due to the inability of the heart muscle to respond to the sudden strain, of course the common type of insufficiency is one due to the slow failure of the heart muscle in its contractile power. If the heart is exposed in an anesthetized animal, and the usual laboratory devices adopted to test conditions of pressure within the heart and in the peripheral circulation, and then some substance is injected into the heart muscle which will interfere with its contractile power, we can study both the ability of the peripheral circulation to assist the failing heart muscle, and the degree of injury which the heart muscle itself can withstand without becoming actually incompetent. I have used 95 per cent. alcohol, which I have injected first into the left ventricle and then into other parts of the cardiac muscle, each injection resulting in a coagulation necrosis which so simulates fibrous changes occurring in chronic myocarditis, as to present on gross inspection an excellent picture of the battle-scarred heart which we find at human autopsies. Of course as soon as the injection has been made the heart muscle loses in efficiency, each one causing a considerable area of infarct in the heart muscle, with but a very slight permanent effect upon the general blood pressure.

The pulse excursion has diminished, the arteries are generally contracted throughout the body, and we find that peripheral support has been able to maintain the pressure in the presence of a failing heart muscle. The pressure will be maintained for several hours at a point very little below the normal pressure. But we can expose the difficulty under which the circulation is maintained by suddenly throwing an extra load upon the heart muscle, as for instance, by causing temporarily a moderate asphyxia, which under ordinary conditions is responded to by a sharp rise in blood pressure and increased heart action. With the injured heart muscle and the already contracted peripheral vessels the response demanded by asphyxia is neither as prompt nor as considerable as we get under normal conditions. Again the use of adrenalin, (or in other words, putting an increased strain upon the heart muscle), will fail to develop the rise which we have learned to expect from the exhibition of this drug.

These are merely two illustrations of what we are wont to meet with in practice, the inability of the diseased heart to accommodate itself to more than an extremely narrow range of increased effort. The man with chronic myocarditis succumbs more readily than the normal man to any interference with his pulmonary tract. Every exertion,—over indulgence in a heavy meat diet or tobacco will in some instances be sufficient to put the extra load upon the heart, which our heart is now unable to meet.

To return to our now scarred and laboring heart. We may continue throughout twenty or thirty further injections of alcohol involving apparently all the visible surface of the heart in non-contractile scar tissue, and still we shall find a sufficient pressure to maintain life processes. We may look upon the heart and see that its contraction is regular. The auricular impulse is followed, though clumsily, by the stiff, awkward ventricle. That the heart is laboring is evidenced by the distended cavities, the rounded apex and the congestion of the right heart with deep purple blood. It would seem impossible that a heart so scarred, so little able to completely empty itself during systole, should still maintain a sufficient output to carry on the circulation, but we must remember that the two important factors of cardiac valves and peripheral blood vessels have in no way been interfered with.

Having seen our blood pressure gradually fall from 120 mm. to perhaps 80 or 70 mm. of mercury, we can now try some of the more dramatic changes in the heart action. If we are fortunate we may either involve the auriculo-ventricular bundle of His in our alcohol coagulation, or we may include one of the branches of the coronary in our injection infarct. In the first instance we may get a failure of sequence between the auricular and ventricular contraction; in the second we are certain to get an immediate paralysis of the heart muscle, with a fall of the blood pressure to zero and immediate death. During the course of this experiment it is interesting to detect by the stethoscope the changes occurring in the muscular sounds of the heart. The valvular sounds remain fairly clear until the later stages of cardiac insufficiency allow regurgitant murmurs to develop on both sides of the heart, but the lack of clearness in the first sound of the heart, the distant, dull, weak character of the first sound of the heart grows more noticeable with each additional segment of the heart muscle which is rendered inactive by alcoholic coagulation. On gross and microscopic examination of a heart thus injured we can detect these large wedges penetrating even to the papillary muscles, but of course we do not have the histological picture, which a true fibrous or fatty myo-carditis would present.

In imitating the changes resulting from pericardial effusion we have a comparatively simple proposition experimentally. The changes in the peripheral circulation can be carefully watched while fluid is allowed to flow into the pericardium under various conditions of speed and pressure. A considerable bulk of fluid rapidly introduced into the pericardium almost immediately brings the circulation to a standstill, apparently because the heart is unable to accommodate itself quickly enough to the changed conditions of pressure upon its surface, and partly because the pericardial sac cannot bring its elasticity into play with sufficient promptness. The main cause of failure in thus suddenly distending the pericardium with fluid is the immediate shutting off of the supply of venous blood to the right side of the heart, for it takes but little pressure to obliterate the great veins as they enter the right auricle. If we now allow our salt solution or other indifferent fluid to distend the pericardium very slightly, allowing the circulation to adjust itself to the altered condi-



tions in the immediate vicinity of the heart, we find that small changes are recorded in the peripheral circulation. The heart rate remains the same. The blood pressure persists at about the same height. The arterial tone is not noticeably altered. The pericardium becomes distended, the heart sounds are distant, and the heart becomes somewhat displaced. The heart under these conditions is in a condition of what we may call latent incompetency, for it is found unable to stand extra load if put upon it in a way quite similar to the heart in experimental myo-carditis. The pressure in the pericardium and the pressure in the veins being recorded it will be possible to show that the failure of the heart action would occur at the time when the pressure in the pericardium succeeded in so diminishing the venous inflow that the blood pressure could not be maintained by the ventricular output.

Two additional demonstrations which are fertile with points for medical and surgical practice are those of capillary circulation and the results of infusions. If we project upon a screen an enlarged microscopic field of the capillary circulation, for instance of the frog's bladder, we have then a material for study, which will illustrate the details of the early stages of congestion and inflammation. The classical picture of the capillary circulation is presented sufficiently enlarged for one to detect easily the difference between the red and white blood cells, and even to see the nuclei of the endothelial cells forming the walls of the terminal capillaries. May I stop a moment to remind you that the maintenance of the pressure in the capillaries is the ultimate object of the entire remainder of the circulatory apparatus. Unless the ventricular systole and the elastic transmission of the arteries is sufficient to overcome the resistance in the capillaries, the circulation will not accomplish its main purpose. So sensitive are the capillaries to alterations in pressure that while one observes even for periods of a few minutes, whole groups of capillaries will suddenly appear distended, as they are by slight increase of arterial pressure, or will fade from the field when there is no longer sufficient pressure to distend them.

The severe functional failures of nervous glandular or muscular tissue in any part of the body, which must result from any marked degree of circulatory depression, becomes clear to one after he has watched the delicacy of adjustment be-

tween pressure in the arteries and distribution of the blood in the periphery.

What impresses one quite as much as the general phenomenon of the capillary distribution of blood, is the rapidity with which the agents of repair are brought into play on the first warning of interference with the circulation. Suppose we should, for example, chill or heat or irritate the surface of the frog's bladder, or cause slight stagnation of the flow of blood by pressure upon the surface under observation,—at once there is a slowing of the arterial supply, a stagnation of the capillary stream, and a congestion and delay in the venous outflow. Incidentally we find an accumulation of white cells lining the capillaries within, and appearing as highly refractive globules between the central moving mass of red cells and the walls of the smaller arterioles. Within five minutes after any noticeable hindrance to the blood stream we will find the leucocytes already passing through the walls of the capillaries, and preparing to play their part in meeting whatever harmful substance they may find in the tissues outside the capillary walls. With a resumption of normal conditions in the area we are studying, these leucocytes will again promptly re-enter the blood stream, and the normal conditions will as promptly be resumed.

It is well to bear in mind this amazingly efficient and prompt mechanism for meeting and overcoming infection, and to withhold our hands from the administration of anything which will inhibit or delay the efficiency of this physiological response to irritation. Three commonly used drugs are a serious detriment to the activity of leucocytes and their ability to respond efficiently to a call upon their proper functions. I mean of course general anaesthetics, alcohol and quinine, all three of which substances have been shown to materially hinder the powers of the leucocytes to emigrate, to perform their phagocytic power, and to increase in response to a physiological need of the human organism.

There is always a lesson to be learned for students, and I think also for practitioners in a careful study of the results of venous infusions. This, of course, can easily be done under experimental conditions, and I would recommend all who are likely to be called upon to use infusions under emergency conditions in hospital wards or operating rooms, to recall to

mind the inevitable results of a too rapidly performed or a too bulky infusion. If the infusion cannula is connected with the external jugular vein, and a normal salt solution allowed to flow, as it were, directly into the right auricle, the sudden fall in pressure and the irregularity of the heart action that results, is always most disconcerting.

If in addition to the recording mechanisms above described, we measure the output of the heart by a device recently perfected by Professor Henderson of Yale, we will notice that when we increase suddenly the flow of venous blood into the right heart we may increase the bulk of the heart while at the same time causing a decrease of its output. This seems like a paradoxical statement, but I think you will understand it when you realize that a distension of the right heart causes a diminution in the force of its systolic contraction, and that if suddenly an increase of blood distends the left heart it cannot respond as promptly by an increase of contractile ability. This may be transient and the heart presently resumes its normal conditions. If, however, we continue, or for any considerable period allow an increase in the bulk of venous supply to the heart, we will presently detect, together with the increase in the bulk of the heart and a decrease in its output, a beginning of irregularity in its action. This is really in the nature of a moderate muscular incoordination, due, I believe, chiefly to a distension of the right auricle which bears the brunt of the abnormal condition, while at the same time having the burden of initiating each cardiac cycle. If we observe the auricle directly, under conditions of forced venous infusion, we notice its distended, almost paralytic condition, and the irregular contraction of the ventricle appears to follow as a necessary sequence the uneven contraction of the auricle.

One point in the use of infusions I may properly speak of here. If in a condition of sudden cardiac failure, during anaesthesia, an attempt is made to use a cardiac or vascular stimulant, it is well to remember that the venous pressure is at zero and blood is no longer flowing to the heart, and if, for instance, adrenalin is given in the vein of the arm, the chances are that it will not reach the heart muscle or the arterial side of the circulation. Under such conditions it is well to use an arterial infusion, as for example a small amount of hot saline with adrenalin. The injected

fluid will reach directly the left ventricle, where the mechanical pressure first, and the specific action of the adrenalin later, should be effective in starting up the cardiac contraction and setting the circulation going again.

Let us now consider some of the lessons to be learned from experimental study of the respiratory tract. A fair imitation of an acute bronchitis such as is occasionally seen resulting from exposure to irritating fumes, can be produced, allowing the animal to breathe through its tracheotomy tube while under anaesthesia, air which has passed through a flask of chlorine water. After about half or three quarters of an hour a few scattered, small moist rales will be heard in size until there is an evident dyspnoea, resulting from the interference with the access of air to the pulmonary surface. If we allow pure air to be breathed we get a recovery from the symptoms caused by the accumulation of sero-mucus secretion produced overabundantly by the irritated mucous glands of the bronchi. The secretion is promptly absorbed. The increase in the rate of respiration no longer persists, and the auscultatory sounds of the bronchitis disappear after allowing the animal to breath pure air for half an hour. This may be repeated a number of times with just as definite results and recovery, but after a while the hyper-secretion in the bronchi resulting from repeated irritation may end in a flooding of the entire pulmonary parenchyma and a condition akin to oedema will result. On autopsy we find the lungs of an animal so treated without areas of consolidation and without gross evidence of circulatory congestion, but apparently the seat of an acute exudative process.

In the course of his studies on transudates and exudates Dr. Opie found it entirely feasible to induce acute serous pleurisy by the injection of spirits of turpentine into the plural space. If 2 cc. of the turpentine is injected directly into the plural space on one side of a small dog there will certainly develop within three or four days, a well marked accumulation of fluid on that side. In another day or two the fluid will reach its maximum, in some instances filling the entire plural space upon that side. At the end of ten days the fluid will be found to have been entirely absorbed, and in two weeks at the outside, no trace can be found on autopsy of any change in the pleura. For my purposes I have found it convenient to pre-



pare a number of animals on different days, so that at one time a class could study to their own satisfaction or confusion the signs of fluid in the chest. The exact level of the fluid in the different animals always brings out a profitable discussion of the relative value of physical signs, and the chastening effect of verifying our conclusions by the use of the aspirating needle has always seemed to me very profitable. If now one animal which is at the height of its inflammatory process is prepared, under anesthesia for thoracentesis, and the fluid suddenly withdrawn with considerable suction, while at the same time a manometer is connected with the carotid artery, and a pleural canula gives us tracings of the intra-pleural pressure on the opposite side, we get an excellent illustration, as well as explanation, of the causes of sudden circulatory failures which are often seen in injudicious removal of fluids from body cavities. The carotid pressure drops suddenly. Dyspnoea is noticeable, and the heart beats become feeble and rapid. We have suddenly sucked into an inelastic compressed lung a large amount of blood. We have changed from a degree of positive pressure to considerable negative pressure the conditions of the heart and great vessels at the base. We have practically bled the animal into the pressed lung, which is unable by elastic recoil to empty the blood into the circulation. If the fluid is again allowed to re-enter the chest cavity and the lung is again squeezed tightly against its hilus, the circulation will again be seen to accommodate itself, and the pressure to resume its normal level. Then we can withdraw, under proper precautions, slowly and preferably by gravity only, a portion of the pleural exudate, and can easily see that the circulation is in no way injured by our procedure.

One of the most beautiful and instructive procedures we can see experimentally is the combination of studies upon the kidney which the oncometer places at our disposal. If we surround the kidney with a compressible water bag, with an exterior rigid case, the water bag being connected with a registering manometer, we shall be able to detect changes in the bulk of the kidney produced by circulatory variations. If we connect the ureters of the same animal by a Y tube which will drop its contents upon a recording tambour, we are in a position to try conclusions as to the effect upon secretions of alterations in cir-

ulation. In general we find that, other things being equal, an increased general blood pressure gives us an increased outflow of urine with an increase in the bulk of the kidney. But if we cause our high pressure by general vaso-constriction, for example by the use of adrenalin, we get an almost complete cessation of urinary secretion and a shrinking of almost 30 per cent. of the kidney bulk. It is apparent then that the ideal conditions for renal secretion, simply from the point of view of blood pressure, are a dilated path through the kidney and a constricted general circulation.

It has been found by some English observers that certain drugs which cause a rise of blood pressure by virtue of constricting the peripheral blood vessels, do not act in a similar way upon the vessels of the viscera. They have shown that meat extracts in the course of their elimination will cause a dilatation of the vessels of the kidney, but a constriction of those of the muscles and skin, thus putting the kidney under ideal conditions for eliminating harmful substances. By stimulating the vagus nerve and causing a drop in pressure by cardiac inhibition, we get of course a diminution of the bulk of the kidney and a cessation of secretion of urine. The application of warmth to the surface of the body in the vicinity of the kidney has been found to increase the blood flow through the kidney as much as 20 per cent. and cause a marked increase in the secretion. The specific secretory properties of the renal cells can of course be excited by substances contained in the blood, independent of the circulatory conditions existing at the time. No one can study the action of the kidney in this way without being impressed by the value of assisting its function by circulatory adjustment as well as by drugs directed towards specific action upon the kidney proper. In proportion to its bulk the kidney has passing through it about fifty times as much blood as muscle tissue has, and when we find a high blood pressure accompanying pronounced renal disease, it would be a fairer general conclusion to admit that the high pressure was necessary, than to direct our efforts to dropping the high pressure because forsooth it was higher than the normal.

Increase of blood pressure is one of the earliest responses the cardio-vascular system makes to an interference with the function of almost any organ, and this is

specially the case where interference with the kidney function is involved. If the kidney parenchyma is the seat of fibrous change or chronic degeneration, it will take a greater amount of pressure to pass the same bulk of blood through the diminished remainder of kidney tissue than it did before to accomplish sufficient elimination. Increase of pressure is accomplished probably first by general vasoconstriction and later by cardiac hypertrophy. If we find a heart compensating for the diseased kidney let us not interfere with the physiological adjustment of the circulation by trying arbitrarily to drop the blood pressure. The abnormal condition of the kidney demands assistance by the circulation. If the assistance is not called upon too often or too rapidly or for too long a period, a fair equation can be reached and elimination be properly accomplished. Our main efforts should be directed, under these conditions, to diminish the demand for elimination, rather than attempt to use our own judgment as to what pressure will suffice to keep the kidneys working.

There is only one further method of studying that I should like to call to your attention because it is at present producing such interesting results in the hands of Professor Burton-Opitz. I allude to the use of the stromuhr in the study of the venous flow from various viscera and body tissues. The Optiz recording stromuhr consists essentially of a cylinder and a piston, which is made to move back and forth horizontally by the flow of blood through the cylinder from openings at each end. A vein is connected by peripheral and central canulas directly with the stromuhr. As the blood flows through the stromuhr and onward through its proper venous path, it pushes the delicate piston in first one direction and then another, the piston meanwhile recording by a lever, the extent and rapidity of its excursion. If such a stromuhr is attached to a mesenteric vein and a splanchnic nerve is stimulated, the flow will almost cease, being resumed again only when the effects of the stimulation have passed off and allowed vascular relaxation. A very moderate distension of the intestine with air will promptly put an end to the venous flow from that section of the gut, illustrating to my mind the extreme delicacy of the adjustment between supply and demand in the circulation. There is not more than just enough pressure given to the capillaries to allow their function to

be fulfilled. If abnormal conditions arise there is, at least for a brief time, an interference with absorption, nutrition and secretion, for, with the venous flow stopped, we know there is no passage of blood through the capillaries. The nervous control of the blood supply through the kidney, spleen, the intestines, the lungs, and the head and various glands of the body has been studied with mathematical precision by this method, and our respect for the ability of the nervous control of the circulation to adjust itself to the countless varying demands made upon it increases with each addition to our knowledge of the venous flow.

In closing this rather sketchy account of some of the laboratory work which you may have been interested to hear of, I want to explain that my chief desire in presenting this matter to you is to suggest that the study of medicine and surgery need not be advanced exclusively by those with large clinical and hospital opportunities, but can also be furthered by anyone who has the time and willingness to take advantage of the laboratory facilities that the colleges offer. There is a large field open at present to anyone who will train himself in physiological methods of study, and we do not lack problems but workers to take them up.

Please accept my profound regret that I have been unable to be present myself at this meeting, and accept also my thanks for your courtesy in allowing me to have the opportunity to present this subject to you.

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### BACTERIOLOGICAL NOTES ON DIPHTHERIA\*

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**By George T. Welch, M. D., Passaic N. J.**

From very remote times the feeling existed among scientific men that many of the diseases that harassed humanity were due to subtle miasms, too small to be comprehended, but too manifest to be ignored. As far back as medical literature is known to extend, we find these surmises existing. The ancients peered into the unknown, feeling their way largely into the darkness of their times, and searched the winds and the vapors for causes that mocked and eluded them. So slow is the growth of a great idea that we need not be surprised

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\*Read before the Passaic City Medical Society, March 11, 1909.



that it was not until our own times that we had perfected instruments of precision, sufficiently exact to show us the infinitesimal creatures of the underworld that tear at the fabric of our lives and reduce us to the dust that we tread upon. Long anterior to the birth of Christ, it is believed the magnifying property of the lens was known, but it was not until 1590 that the first compound microscope was made. And it was not until 1683 that Anton Leeuwenhoek, examining through his microscope a variety of objects, discovered the bacteria so long anticipated. And doubtless we are upon the threshold of greater discoveries in this direction, and while we are now conversant with the bacilli of a few diseases, as the years go by we shall gradually unravel the mysteries of all the others, and antitoxins will be discovered that will neutralize their effects and immunize the human race. I think it is not too much to expect that some diseases will become banished from the earth, or at least, so far immunized that they will be no longer gravely considered.

In a little over one hundred years that loathsome and once hopelessly regarded pest, smallpox, has become, under the iterations of vaccination, a rare and modified disease. I never saw a case of it, and there are thousands of other physicians who can say the same. Since the advent of Behring's antitoxin, in 1890, diphtheria is no longer regarded with alarm among the laity, uneasiness has taken the place of consternation, while the profession regards the management of the disease with great assurance. In nineteen years so universally has this remedy been used, that there is, apparently, already a modification in the virulence of the disease. Certainly it does not begin with the rampant toxemia that I had observed in some epidemics of diphtheria before 1890. It seems like a horrid nightmare now to read, in books published twenty-five years ago, of the septic and gangrenous forms of the disease then observed; of the secondary affections, the paralysis of the throat, of the larynx, of the trunk and the extremities; with the spread of the exudation into the bronchi, the alterations occurring in the lungs and pleura; the emphysemas of the heart, the poisoning of the abdominal organs; the destructive process of the general infection upon the brain and spinal cord! There have been no such gruesome reports in current medical literature for some years now.

This amelioration has been brought about by the discovery of bacteria in diphtheritic membranes, by Oertel and Huder in 1868, and the discovery of the antitoxin of Behring. Oertel, at first, regarded all the vegetable organisms that he discovered in a throat diseased by diphtheria as being, in the gross, the cause of the affection, but later observations of Klebs-Loeffler in 1883, in which his own coincided, showed that to one particular bacillus—the barred type—could the peculiar toxin of the disease be attributed. Other forms, known as streptococci, accompany the barred bacilli, and are accessories to the act, sometimes themselves producing a mixed affection which is not true diphtheria, but which simulates it, and in its clinical aspect is at first puzzling to the physician. But it is the barred type of bacillus diphtheria that initiates the destruction and violently opens up the avenues to death.

A colony of these bacilli, too infinitesimal to be recognized—each individual of which would average about 1-12000 of an inch in length—finding lodging in the human throat, if unimpeded in their development, would in two or three days increase to billions, covering the tonsils, the pharynx and all visible parts of the throat with an ashy crust of poisonous bodies, extending into the nasal cavities and down into the larynx and beyond. Fortunately this condition of affairs is seldom seen now. Nor is it probable that any living organism can increase in the geometrical progression of which it might be capable, for other forces are always at work to impede, neutralize or exterminate. The asp that gored the bosom of Cleopatra was not so deadly though, in comparison to its size, as is the bacillus diphtheria. The latter is capable of producing a new cell, equally as virulent as itself, once in about thirty minutes, and the new cell rapidly maturing, also begins to produce new cells, and these to produce others in a marvelously short time. And the progeny is each capable of secreting and emitting its virus.

According to observers of the natural history of diphtheria, "the bacilli spread over the membrane of the trachea, and beset the cellular elements, crowding into the young exudation cells, or are taken up by them, and gradually cause their dissolution; they fill the blood and lymph-vessels, and bring about in a mechanical way a damming up of the fluids and, as a consequence, serous exudation; as they

close up the capillary vessels, they occasion stagnation in the blood circulation, which induces disturbance of nutrition in the walls of the capillaries, and even rupture of the same. Muscular fibres, also, which are covered and filled with colonies of bacteria, denegerate and slough; in like manner, in severe cases, immense numbers of the latter appear heaped up in the uriniferous tubules and Malpighian corpuscles of the kidneys, and occasion there parenchymatous inflammation, with ruptured vessels and formation of epithelial casts in the tubes."

Within the last two or three days I have looked over several volumes of old health board reports of this and other States, issued between 1870 and 1890, and have been struck with the earnest, but painful conjectures of many observers as to the causes of diphtheria, in the many ruined homes that were devastated by the epidemics that frequently passed over the country. There was an evident reluctance to believe that the shrewd little eye of the microscope could discover what they in an ampler scope could never ascertain. Like Hippocrates of old, they still ascribed to winds and moisture, to ferments and uncleanness, the source of infection, though admitting their perplexity in finding very often in the most sanitary dwellings the disease established, and the little children of the rich dying by scores, while the hovels of the poor were not invaded.

But at length we came to know that the diphtheria bacillus is not the spontaneous outgrowth of decomposing material, but is a live organism propagated in the bodies of living people; that it is not found in dust, or sewer air, or water, or in any inorganic substance, until it is deposited there from some individual. The germs will live for a long time outside of the body, where they have lodgment upon unfumigated material, but the danger from them is incomparable to that from the infected person who scattered them there. The source of infection is almost invariably from the diseased person, to the one who is susceptible and is in close contact to him, or from a well person who has come into contact, and who harbors the specific germ in his nose or throat. Healthy individuals engaged in nursing diphtheritic patients can hardly avoid inhaling the bacilli which are projected into the air by efforts of coughing or talking, but the most usual way is by direct con-

tact, by unconsciously using the same cup or glass or spoon, which has not been thoroughly disinfected, by touching the clothing or person of the ailing one, and conveying away upon the fingers the germs that had been deposited there, and then depositing them anew upon some article of food or drink that is unluckily conveyed into the mouth. A kiss is the sealing of a social contract between parties, and, like every contract, it carries with its emolument some risk, if not penalty, its "quid pro quo," and many are the records of a kiss conveying diphtheria to the venture-some one. Within a week I have taken cultures from the mouths of two adults who had attended upon two children ill with diphtheria, and while both are to all appearances perfectly healthy, one was found to have harbored the bacilli of the disease. A second culture taken from the latter on last Tuesday morning did not have the diphtheria bacilli present. One of the children, at the end of two weeks from the beginning of the disease, still shows the presence of the bacilli, but the second child, at the end of ten days from the beginning of its illness, does not show the bacillus.

And this leads me to the proposition that boards of health should release from quarantine all cases of diphtheria, when at the conclusion of the disease two negative results are obtained from cultures by the official bacteriologist employed by the city or State. To keep a patient quarantined after this is to exercise an arbitrary and unwarranted power. In New York, patients are released after one negative result is obtained. In Boston two are required. Other cities differ as to the number, but agree as to the reasonableness of the test.

These variations are often quite marked in different individuals. Jordan, in his book on bacteriology just issued, tells of a child in whose throat virulent germs were found at the end of 335 days after the clinical manifestations had ceased. On the other hand, here is a child that does not show the presence of the germs ten days after the disease began, and the mother who showed the presence of the diphtheria bacillus at the end of ten days, does not have it at the end of fifteen days. In schools, or institutions, where the disease is prevalent, unless the most scrupulous care is shown, the bacilli will be found in the throats of healthy children, conveyed there by the means above detailed.



Whether bacteria are to be regarded as animals or plants, depends largely upon the angle of one's viewpoint. It is possible to descend so low into an inquiry into the minutest living products of nature, as to arrive at a solitude, where one cannot say whether it is an animal or a vegetable that exhibits itself through the prism below him. The power of independent movement is advocated, as the mark of animal nature, but some plants also contract and move. But by tacit agreement, bacteria are regarded as of vegetable organization, and the bacilli of diphtheria are not observed to possess the power of movement. A soluble toxin is formed in the bacillus which diffuses out from its body into the surrounding medium. This toxin is present in the sterile filtrate of a broth culture of these bacilli. Some specially selected strains of bacteria have been found to yield a more potent toxin than others, and are in widespread use in establishments for the manufacture of diphtheria antitoxin.

Behring in 1890 found that the serum of rabbits that had been immunized against diphtheria, by inoculation with attenuated and then with virulent cultures, contained a substance capable of neutralizing the effects of infection in other animals. In fact, it was found to be specific. What this active principle is is still chemically unknown, but it has been designated as diphtheria antitoxin. Selected horses are now used as being especially suited to the production of antitoxin. At first the amount of antitoxin used in a given case was small, practitioners guardedly preferring to inject 500 or 1,000 units, at intervals of a few hours, until the desired effect was produced, rather than a larger amount at once to produce the same object. But, as experience increased, confidence was gained, and it is finally conceded that so far as the safety in the use of the antitoxin is concerned, there is no limit to the number of units that may be given in a case requiring heroic measures. According to the case, then, from 1,000 to 4,000 units are given as the initial dose, while in a case presenting extensive and alarming invasion, from 8,000 to 10,000 units should be injected, and one authority does not hesitate to prescribe in a dangerous case 50,000 to 100,000 units, in properly interspaced doses.

A few sudden deaths have been ascribed to the administration of antitoxin, and it is possible that some individual peculiarity

lies at the bottom of the trouble, but we must remember that it was by no means unusual in the years before 1890, for a patient to die with tragic suddenness from the effects of the disease upon the heart, at a moment, too, when all seemed to be going well. I recall one such case in my practice, in the person of a daughter of the late John Wynne. It was about 1890, before I had begun the use of antitoxin. Her throat was better, the membrane was disappearing, the child was begging to sit up, at which the relieved family were rejoicing. She was bolstered up to a sitting posture, and asked for her doll. Suddenly the smile faded from her face, she dropped the toy, gave a little gasp, and was dead. If I had just used antitoxin, what a disastrous sensation this would have caused.

But the efficacy of antitoxin is too well demonstrated in thousands of cases to be any longer questioned, or retarded by any untoward events occurring at immense intervals. In New Jersey for nineteen years preceding 1898, the annual average of deaths from diphtheria was above 1,400—as if a Herod or a Moloch, stalking in darkness, should have strangled all the little children of a city, and then gone into another municipality to renew the monstrous crime. But by 1898 the use of antitoxin had become pretty well established, and the death rate in that year fell to 784. Formerly the percentage of deaths from diphtheria in New Jersey per 10,000 inhabitants ranged from 11 to 14 per cent.; now the rate is less than 3 per cent.

It could be considerably lessened if the physician called to a case could be scientifically sure of its nature, at once, or in a few hours, through bacteriological examination, and should give antitoxin in sufficient amount within the first twenty-four hours. But as it is, places as distant by mail as Passaic from the State Laboratory of Hygiene at Trenton, must necessarily suffer from the delay in transmission of cultures and the receipt by telegraph even of the result of the investigation; and if the physician has not at once injected antitoxin upon suspicion of the nature of the disease, his patient might be dead, or beyond recovery, by the time he could receive the bacteriologist's returns. This I say with all due respect and appreciation of the immensely valuable work being done at Trenton. The director of the State Laboratory does all in his power, but he cannot neutralize the tardiness of the mails. Last year, under his superin-

tendence, 12,618 specimens of various diseases were examined, 6,090 being cultures from diphtheritic throats. The fact is, every municipality the size of ours should have a laboratory for the performance of routine diagnostic work. In Trenton, a physician can have a culture of diphtheritic matter at the State Laboratory before 9:20 A. M. and have his report from it by noon. Here we must often wait twenty-four to forty-eight hours for a telegraphic report, depending upon the time when the culture left here by mail. By mail both ways it is longer yet. This is deplorable and must often lead to the sacrifice of human life. The cost of maintaining a laboratory here for the purpose of making these examinations would not be very great, and probably would be less, if a man skilled in bacteriological examinations could be employed to attend to those of diphtheria only. Newark and Montclair do their own work in bacteriology, and probably there are other cities in our State that do this also, as I notice in the last State Board of Health report that there are several large municipalities from which only a very small number of specimens were sent for examination to the State laboratory, and it is not to be supposed that the physicians there are not fully alive to the necessity and benefit of this procedure. The largest number of specimens examined from any city is from Trenton, showing that the medical men there avail themselves largely of the prompt service their proximity affords them.

It is thus demonstrated that where speedy returns from bacteriological examinations can be had, physicians more largely avail themselves of this precise means of diagnosis, and the advantage to human life in peril is immense. The governing body in a municipality, as large as ours, should see to it that every facility is provided for thus conserving the health of its citizens.

As to the prophylactic power of antitoxin in checking the outbreak of an epidemic of diphtheria, I need only mention the gratifying effect, when a whole household has been given this serum, upon the discovery of a case of the disease therein. It is the routine practice in some European hospitals to give a preventive dose of antitoxin at regular intervals to all the children in these institutions, and the procedure is said to be attended with great success. In 1904, 1,000 unit doses were

given in Baltimore to 382 children that had been exposed to the disease, and only one case of diphtheria developed among them.

It is said that the rhythmic recurrence of the shouting of a multitude of warriors brought down the walls Jericho, and some camp follower of the opera has suggested that if, at the same minute, every inhabitant of the earth should raise his voice in a shrill crescendo, the sound would jostle the moon and be heard in the planet Mars. The first is mythical, and the last impossible, but I do believe that if every inhabitant of the earth could be given a proportionate dose of diphtheria antitoxin at noon, every twenty-eight days for a year, diphtheria would be banished from the globe. The immunity from a single dose is transient, lasting twenty-eight days, but repetition upon repetition, like the shouting of the soldiers before Jericho, would exterminate this horrid pest.

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### MODERN UROLOGICAL DIAGNOSIS\*.

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The diagnosis of vesical and renal disorders at the present time depends largely upon the exact determination of the sources from which two abnormal constituents of the urine are derived, namely, pus and blood. On the proper elucidation of the sources of blood and pus in the urine we are largely dependent, if not entirely so, on the facts supplied by the use of the cystoscope and ureter catheter or the urine separator. As adjuncts to these, we must apply the microscope in the examinations of the centrifuged urinary sediments; the ureometer for the quantitative estimation of the urea excretion; the cryoscope for the determination of the freezing point of the separated urines and blood; and finally the various methods of qualitative analysis required to estimate the sugar excretion produced by phloridzin injection. On the proper appreciation and application of these mod-

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\*Paper read at the monthly meeting of the Mercer County Medical Society, December 8, 1908.



ern methods rests the fate of the present day sufferer from surgical disease of the bladder and kidneys.

With these introductory words I will pass on to the discussion of the armamentarium and the methods of application in vogue at the present time. I will first take up Cystoscopy, Ureter Catheterization and urine separation, and finally the tests for functional activity, such as the phloridzin method of Casper and Richter, the indigo carmine of Voelcker and Joseph and Cryoscopy (Koranyi).

#### CYSTOSCOPY

We owe the modern cystoscope to the fertile genius of Max Nitze and the mechanical perfections to the makers such as Deicke, of Dresden, who made the first model, Joseph Leiter, of Vienna, and the firm of L. & H. Loewenstein, of Berlin, the latter of whom have brought the instrument to its greatest perfection. The original cystoscope was first demonstrated by Nitze in October, 1877, at a meeting of the Royal Medical Faculty, of Saxony, held in Dresden.

The fundamental principles of present day cystoscopy depend upon the following two factors, both of which were present in Nitze's first instrument: 1—The introduction of the illuminating apparatus within the cavity to be examined (in this case the bladder). 2—The widening of the visual field by means of a system of lenses.

The cystoscope consists of three parts:

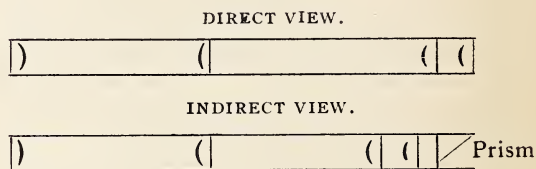
1. The beak, like that of a stone sound, carrying on its end the lamp.
2. The shaft, with the lens system and prism.
3. The ocular or visual end, to which are attached the conducting cords carrying the current to the lamp from the storage battery.

Cystoscopes are of two kinds, depending upon the visual appearance, Direct and Indirect. Another division is into air or water cystoscopes, depending upon the medium used in the bladder during the examination. The indirect variety is usually the water cystoscope but can be used with air dilation as has been demonstrated by Stoekel. The direct view cystoscopes are usually used with air, but can be used with water or air. Undoubtedly water cystoscopy is to be preferred for the following reasons:

1. It is non-painful, air distention causes pain; 2—less danger of burning the patient, although with the modern

cold lamp this is almost impossible; 3—the position for examination on the back is the most comfortable; in air cystoscopy the patient's hips are so much elevated that the position is uncomfortable. This is necessitated in order that the fundus of the bladder be the lowest point, thus keeping the important areas of the bladder free from the urine which flows out of the ureters during the examination.

The main difference between the lens systems of the direct and indirect cystoscopes can be seen from the attached diagram:



They are both alike except for the insertion of a prism which is mirrored, in front of the lenses in the indirect view. The picture being first received on the prism which causes the view to be seen in a reversed manner, i. e. upside down. These indirect view instruments have recently been modified by inserting correction lenses in the ocular after the method of Frank, or by screwing the correction apparatus of Jacoby into the ocular end, thus reversing the picture and showing the part inspected in its natural position. By this means the direct view instrument loses much of its value.

#### ARMAMENTARIUM

I will hand around for inspection the following cystoscopes:

1. Nitze - Portner examination cystoscope.
2. Otis irrigation and examination cystoscope.
3. Tilden Brown compound cystoscope, a direct and indirect view examination, and ureter catheterizing cystoscope.
4. Nitze single catheterization and irrigation cystoscope.
5. Nitze double catheterization and irrigation cystoscope.
6. Chicago air cystoscope with lens system for examination and ureter catheterization.
7. Kolischer-Schmidt direct catheterization cystoscope.

#### CYSTOSCOPIC TECHNIQUE

Preparation of the instruments—owing to the lens system the cystoscopes cannot be boiled but they can be rendered practically sterile by the following method:

1. Vigorous rubbing with green soap and hot water, and absorbent cotton; 2. Rubbing with alcohol 80 per cent.; 3. Stand in 3 per cent. formalin, 5 per cent. carbolic, or 1-1000 hydrargoxycyanat solution for 10 minutes. As a lubricant, sterile glycerin or Casper's lubricant is used. No oil is available, as oils only smear and fog the lenses.

Preparation of the patient: The patient is preferably placed on his back on a fairly high table, with the thighs flexed at a right angle, the calves resting in a suitable crutch such as the Bierhof or the Elden Brown. The shoulders are slightly elevated. The glans penis and the vulva in the region of the external urinary meatus are washed off with some antiseptic solution, such as bichloride 1-3000, 3 per cent. formalin or 1-1000 hydrargoxycyanat. Local anesthesia is not usually necessary. It can, however, be applied easily. 10 c. c. of a 2 per cent. novocain solution containing 5 drops of a 1-1000 adrenalin chloride solution is injected into the urethra and retained 5-10 minutes by clamping the end of the penis with a Stockman clamp; or a tablet of 1-3 grains of cocain hydrochlor. or alpyin may be deposited in the deep urethra which is the most sensitive part of the canal, with a Bransford Lewis tablet depositor. With this latter method anesthesia is complete in 5 minutes; the bladder is then irrigated through a soft rubber or metal catheter, until the medium returns clear. English surgeons prefer to examine with the urine as a medium providing it is clear. It is preferable, however, to use either sterile water, boric acid solution or 1-5000 or 1-10000 hydrarg. oxycyanat solution. The bladder is filled until the patient complains of the fulness, or about 150-200 c. c. have been injected. For filling, one can use either a fountain container or a hand syringe of known capacity—100-150 c. c. The hand syringe is preferable and cleanses the bladder the best. The introduction of the cystoscope presents no great difficulty.

#### WHAT IS SEEN IN THE NORMAL BLADDER.

1. The beak of the instrument being in the center of the bladder, looking upwards one sees the beautiful pale yellow bladder wall, broken by coursing red blood vessels. One also notes a flickering ball in which he sees the lamp of the cystoscope portrayed; this is an air bubble and marks the highest point of the bladder fundus.

2. In pulling the instrument outwards the lower half of the field is of a dark translucent red color, which is the upper margin of the vesical sphincter, through which the light is transmitted.

3. On turning the cystoscope over after re-introducing it until the sphincter margin is lost, at an angle of  $45^{\circ}$  the ureter opening of the side towards which the beak is turned comes into view. It is usually an oval slit with a sheaf of fine blood vessels about it. It is situated at the outer end of the trigone which is a white bar, behind which is the dark illy lighted basfond of the bladder. By following the trigone to the opposite side the other ureteral orifice comes into view.

4. The lower margin of the sphincter is seen by depressing the ocular of the cystoscope and pulling the instrument outward. It is of a darker red color and thicker and more uneven than the upper margin. I will not go into the methods of the more exact survey of the bladder, being content to give you only a general insight into what is seen.

#### WHAT CONDITIONS ARE FOUND IN PATHOLOGICAL BLADDERS.

1. Cystitis—Not usually a diffuse process but mostly a circumscribed process, particularly about the vesical neck, the so-called cystitis colli; 2. Tumors—papillomata, carcinoma, primary and secondary; 3. Stone. Their number, size and shape; 4. Ulceration. Ulcers usually situated at or near the trigone; 5. Changes at the vesical neck, as in prostatic hypertrophy; 6. Changes in the ureter mouths, such as are seen in impacted ureter stone, tuberculosis and other suppurative diseases of the kidneys; the escape of blood clots, pus plugs and free blood from the ureters; 7. Alterations in the shape of the viscus due to disease of the bladder, such as trabeculae, diverticulum and fistulae; or to diseases without the bladder, such as abscess around the organ, or cancer of neighboring organs producing the so-called bulbous edema.

#### URETER—CATHETERIZATION.

Two methods are commonly used. 1. Direct with air and water cystoscopes; 2. Indirect with water cystoscopes. The indirect method is by far the easiest; it has the widest range of usefulness, and it is a fact that whenever you can see the ureter mouth you can catheterize it, which is not true of the direct method. The bladder is usually filled with 300 c. c. of



fluid; although such a large quantity is not always necessary. In the male local anesthesia is always necessary. It is not necessary to insert the catheters into the renal pelvis, about 10 to 15 c. m. up the ureters is sufficient. The catheters used are of the zebra type, Nos. 5 to 8, with stylets. Each marking on the catheters denote 1 c. m. The method of catheterization is extremely simple and can easily be learned in a few lessons from a competent instructor. The most important point is the finding of the ureter mouth.

Ureter catheterization is used for the following purposes:

1. Separation of the individual urines for functional activity tests, for the diagnosis of unilateral disease, as in pyonephrosis, hydronephrosis, stone in the kidney and tuberculosis of the kidney;

2. For diagnosis of diseases of the ureters, such as stricture, ureteritis and impacted stone;

3. For therapeutic purposes, such as renal lavage in pyelitis, and ureteral lavage and injections for ureteritis and to loosen impacted calculi;

4. For prophylactic purposes, as in operations on the uterus; to be used as guides to prevent ureteral injuries;

5. For differential diagnosis of renal pain by pelvis distension producing attacks of pain on the side affected (Kelly) or for pyelography (Voelcker), i. e. filling the pelvis of the kidney with a solution containing a substance giving a shadow with the x-ray.

#### THE DETERMINATION OF FUNCTIONAL ACTIVITY.

The subject of functional activity and the tests therefor, is at present much in dispute. The urologists are divided into two camps: 1. Those following the lead of Casper Kapsammer and others, who believe they are of distinct value; 2. Those like Israel who place little reliance on them. There is no doubt that many variable results are obtained particularly if only one method is followed, but where several are combined and the tests are repeated, distinct prognostic significance can be attached to the results. Methods which have helped to reduce the mortality of renal surgery (vide Kummel) must be of some value. The following are probably the best of the present day methods. I will give in outline the general method in use at present.

Preparation of the patient—The exam-

ination is preferably made in the morning. A breakfast of two soft boiled eggs, buttered roll and 150 to 300 c. c. of milk. It is intended to increase the work of the kidneys as well as condense the urine. The bladder is irrigated, filled, examined and the ureters catheterized, usually both. The catheters are not inserted into the pelvis of the kidney but only up the ureters for about 10 c. m. The first few jets of urine are discarded. The urine flows out in jets, not continuously, only so doing when the catheters are within the renal pelvis; 5 c. c. are first collected from each side, centrifugized and the sediment examined microscopically. A second and a third 5 c. c. are taken for urea estimation and cryoscopy. While these latter are being collected phloridzin, which is excreted as sugar by the kidneys, is injected into the buttocks. It is also a diuretic. 1 c. c. of the following solution is used: phloridzin 0.5, sodium carbonat 0.5, aqua distil. 50 c. c. This solution is prepared fresh and sterilized by boiling on a water bath for 5 minutes before using. Normally phloridzin begins to be excreted in 20 minutes after injection. It is very important to note the time of beginning of excretion as well as the percentage excreted (Kapsammer). You begin to test for sugar 15 minutes after injection and continue testing every 5 minutes thereafter during the time the examination lasts—usually two hours. Trommer's or Haines' tests are used. For quantitative work the Fehling titration method or Lohnstein's saccharimeter are used. The entire duration of sugar excretion normally lasts about 3 hours.

The indigo carmine (Voelcker and Joseph) may be applied at the same time that the phloridzin is in action. Usually it is applied without ureteral catheterization, the ureter openings being inspected; about 15 minutes after the injection of 20 c. c. of the following solution: Indigo carmine (Bruckner, Lampe & Co.) 0.4, sodium chloride 0.6, aqua dest. 100 c. c., into the gluteal region. Normally the urine after indigo carmine injection is seen excreted as thick blue clouds on the healthy side; on the diseased side no coloration or a very faint one appears either at the normal time, or it is very much delayed. When combined with the phloridzin method the color of the urine can be noted as it drops off the end of the catheters. This method is of great value in locating misplaced ureters or those

buried in masses of ulceration. The value of these methods depend upon the fact that a diseased organ will excrete these substances either slowly and very little in quantity or not at all, while its healthy fellow will excrete them rapidly and strongly. Recently Beers, of New York, has reported a series of cases in which the relation between the two kidneys after phloridzin injection showed no difference and that the healthy kidney after extirpation of the diseased organ did excrete sugar strongly. This would show that at times the diseased organ would inhibit the work of the healthy one. In these cases a combination of the various methods no doubt would give the best results.

#### CRYOSCOPY.

This is the determination of the molecular concentration of a fluid by means of its freezing point. In its practical application the freezing point depends on its molecular concentration, i. e. the more concentrated a liquid the harder it is to freeze and the lower its freezing point, and vice versa. For the purposes of renal surgery two body fluids are tested.

The Blood—Kummel, of Hamburg, believes this is the most important. It gives information of great prognostic value. In renal insufficiency, the kidney being unable to excrete solids — these being dammed back in the blood—this fluid has a lower freezing point owing to its concentration, and the discovery of this fact makes the prognosis of greater gravity in unilateral disease. This shows that the unaffected side is either also diseased or unable at the time of the examination to do the work it will be called upon to do in case the other organ is removed. The normal freezing point of the blood is 0.56 to 0.58. When the concentration is so great that a freezing point of 0.60 is attained, no operation should be done. Many men do not place much reliance on the cryoscopy of the blood, owing to the range of variation being so small; but there is no doubt that if carried out properly it is of great value.

2. The Urine—This is more practical and besides the range of variation is greater; no value, however, is placed upon the freezing point of the given specimen but rather upon the relative values of the urines separated from the two kidneys at the same time. The normal freezing point lies between 0.90 and 2.30, so that one can see at once

the importance of comparing the two sides because normally both kidneys excrete urines of the same value at the same time but, in unilateral disease, there is a great variation in the amount excreted and the character and concentration of the excreted fluid. Upon these comparative findings rests the value of urine cryoscopy.

Apparatus—The cryoscope consists of three glass chambers, the first containing an ice and salt freezing mixture, the second acts as an air chamber and the third as the liquid container, in which there is a thermometer and a stirring rod. The urine is poured into the third glass up to the level of the top of the mercury in the bulb of the thermometer. The liquid is agitated until ice crystals appear in it and the mercury in the thermometer comes to a fixed point. This is not usually as low as the column of mercury falls, but a little above it. The column falls until ice appears and then rises a little and becomes stationary—this is the real freezing point and is read off as such. It can be seen from the facts given how these modern methods properly applied have great significance and prognostic value in renal disease. We cannot, however, say what the nature of the trouble is, but we can say which side is diseased; whether it can be removed with safety; whether the remaining organ will be able to do the work of both; thus furnishing favorable prognostic information in cases of unilateral renal disease.

Finally, a few words regarding the proper method of testing the urine for tubercle, i. e. the guinea pig method. The smear method when it avails is valuable but we cannot rely solely upon it. The guinea pig method is the most reliable. If a given specimen contains tubercle bacilli, they surely will grow in the pig.

Method of Application—The pig is first tested to be sure it is not already tuberculous. It is given a subcutaneous injection of old tuberculin, about 0.5 grms. In four days, if diseased, it will be dead. If not dead it will serve for the test. A 24 hour sample of urine is allowed to stand over night. The sediment is then centrifugal 5 minutes. The thick pussy sediment obtained is diluted with sterile water; 1 to 3 c. c. of this is injected into the right inguinal and femoral regions subcutaneously. The glands are then crushed with the fingers rather roughly. Ordinarily in from two to four weeks they



are swollen and easily palpable. If they are extirpated at the end of ten days giant cells can be demonstrated microscopically. In three or four months the pig dies of progressive cachexia from tuberculosis and the postmortem will show the specific lesions.

From the above sketch we can see what great advances the cystoscope and ureter catheter have brought in their wake and what a great service to the surgeon and suffering patient the proper application of these modern methods are.

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## RECENT ADVANCES IN OUR KNOWLEDGE OF DIGESTIVE PROCESSES\*

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Most of the facts that we now have on this subject have been the result of investigations carried on within the last two decades. The clinical laboratory and the Roentgen ray have revealed many interesting conditions which enable us to treat diseased conditions more intelligently. In the treatment of disease of the stomach one does not have to give the stereotyped advice to avoid fried foods and fats, but the diet can usually be adapted to the digestive ability of the individual patient. Therefore, these investigations are of great value to the practising physician.

Pawlow and his assistants in their experiments on the work of the digestive glands, formed a miniature stomach from the stomach proper and collected the juice from the former through an external fistula, and in this way they were able to study the effect of various food stuffs, etc., on the stomach secretion. These experimenters likewise stitched the intestinal end of the pancreatic duct into the abdominal wall so that its secretion might also be studied. Dogs were used in these investigations, and in studying the effect of the appetite on gastric secretions sham feeding was resorted to in which the food given to the animal passed out through a previously formed oesophageal fistula, while the gastric juice was collected from a stomach fistula. The gastric secretion both in the time of its appearance and its quality depended upon the kind of food given and the appetite of the dog for this particular food. Some devoured bread with a greater appetite than that which they had for flesh, with a consequent greater secretion when bread was given. The majority of dogs, however, preferred flesh and this produced a greater gastric secretion in those animals than when bread was

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given. Again, when cooked meat was chopped up and given to these dogs they ate with indifference, and the gastric secretion either did not begin at all or it was very much delayed in appearance. On the other hand, when raw meat was given to these same animals a vigorous secretion of gastric juice occurred in five minutes after the feeding was begun. This showed that the appetite is a powerful and important factor in exciting the gastric secretion. It also shows that food for which one has an appetite practically insures a vigorous digestion. Moreover, when one does not have any desire for food after acute illness the appetite may be aroused by the taking of some food. I have frequently suggested to patients thus affected that they try to eat a nice lamb chop, a little fruit, toast bread, tea or something of this sort, and they ate it heartily. Pawlow and others also showed that the appetite caused a secretion of gastric juice even when the sham feeding was conducted and the vagi nerves had been cut in the neck. The old practice—that of giving bitters to arouse the appetite—was corroborated.

Mechanical stimulation of the gastric mucous membrane by using a feather, glass rod, rubber ball, or the blowing of sand into the stomach, had no effect in producing a gastric secretion. Introduction of bread or white of hen's egg did not produce any gastric secretion in an hour or more. The introduction of flesh is able to excite a secretion, although the secretion is weak and very much delayed. The introduction of water is capable of exciting the stomach secretion, as is also peptone, meat broth, meat juice; and solutions of meat extract proved to be constant exciters of the secretory processes of the stomach. Starch and fat had no exciting effect in producing gastric secretion (Chigin in Pawlow's laboratory). Pawlow, therefore, has shown that digestion in the stomach is first carried on by the appetite juice and later by the juice which is due to the presence of food in the stomach. Von Behring has shown that the stomach secretes a large amount of water. Atropin has an inhibitory effect on the gastric secretion (Pawlow). We formerly believed that absorption took place in the stomach, whereas we now know that, with the exception of alcohol and some other substances, little or no absorption takes place in the stomach. As to the control of the pylorus, the presence

of free hydrochloric acid in the pyloric end of the stomach causes a relaxation of the sphincter and the escape of chyme into the intestines. The presence of acid contents in the duodenum keeps the pylorus closed until all of the acid in the duodenum is neutralized by the pancreatic juice, bile and intestinal secretion. Therefore, the time of appearance of free hydrochloric acid in the pyloric end of the stomach has a very important bearing on the time at which the gastric contents begin to pass into the intestine. Since the appetite juice begins shortly after the taking of food and as carbohydrates do not combine with the acid, free hydrochloric acid appears early and carbohydrate food consequently begins to pass out of the stomach early, within fifteen or twenty minutes (Cannon).

Cannon has also shown that when proteid food is eaten this combines with the acid and free hydrochloric acid does not appear until later, that is, in a half-hour to an hour; and fats do not begin to pass out until a much longer time has elapsed—one to two hours. Fats have an inhibiting effect on the secretion of hydrochloric acid and their escape is slower than it is with other food stuffs. This effect of the fat on the secretion of hydrochloric acid is made use of in the treatment of hyperchlorhydria. The effect of the fat in those cases is that it not only inhibits the secretion of hydrochloric acid, but it also increases nutrition and relieves constipation. If there be gastric retention fat should not be given, as it ferments in the stomach. Cannon has shown that when carbohydrates are mixed with a solution of hydrochloric acid they pass out of the stomach immediately, but when they are saturated with an alkaline solution their escape is very much delayed. Meat also when it was saturated with acid, passed out of the stomach very quickly. Water is not absorbed in the stomach and it passes rapidly into the intestines, even when the stomach contains considerable food. It is said this is apparently made possible by a horseshoe-like band of muscle running along the lesser curvature of the stomach and extending from the cardia to the pylorus.

The "acid reflex" from the duodenum to the pancreas was ascribed at first by Pawlow to a reflex arc, but his pupil Popielski, and Wertheimer of Lille, almost at the same time showed that the reflex can be brought about after severance of



all connections between the alimentary canal and the nervous system. This was evidence that the messenger which excites the pancreatic juice is through the blood stream. Bayliss and Starling, in their experiments which had as their object the determination of the factor or factors which excite the flow of pancreatic juice, injected a weak solution of acid into the portal vein without producing a flow of pancreatic juice. Bayliss and Starling, therefore, concluded that the chemical messenger must be something produced in the epithelial cells of the duodenum under the action of the acid and discharged by them into the blood stream. This conclusion was realized, for when some of the epithelium of the duodenum was scraped off and rubbed up with acid and injected into the blood stream of the animal, a flow of pancreatic juice was obtained. This flow was greater than when the acid was injected into the intestines. The name given to this chemical messenger by these observers was secretin.

When the pancreatic juice is secreted it contains no active proteolytic ferment. The other pancreatic ferments are probably thus saved from destruction while in the ducts. Schepowalnikow has shown that as soon as the pancreatic juice reaches the intestine and becomes mixed with the intestinal juice, the trypsinogen of the pure pancreatic juice is converted by a ferment in the succus entericus into trypsin, and it is then capable of vigorous proteolysis. This actuating ferment of the succus entericus Pawlow has named "enterokinase." The flow of bile into the intestine is regulated in a similar manner to that of the pancreatic juice. In the fasting animal the bile is stored up in the gall-bladder and it is poured out when the animal has eaten. But the flow of bile begins after different intervals with different food, and it was shown that neither acids, raw egg albumen, boiled starch, nor water stimulated the discharge of bile, but fat, meat extracts and the products of digestion of egg albumen set up a free biliary discharge. Bayliss and Starling have found that acid in the duodenum quickens the secretion of bile, and that secretion injected into the blood stream has a similar effect. The bile greatly increases the activity of the enzymes of the pancreatic juice. According to Pawlow, the fat splitting ferment is increased two to three fold in the presence of bile, and the proteolytic and amylolytic ferments are increased

about two-fold. It has also been thought that it is necessary for the acid gastric contents to pass through the duodenum in order to excite the secretions of the pancreas and bile. It is true that the most active secretions of pancreatic juice and bile are produced when the acid chyme passes over the surface of the duodenum, but Wertheimer and others have shown that these secretions are also excited when the gastric contents escape directly into the jejunum through a gastroenterostomy opening. It has also been shown that the further down in the small intestine the stimulus is applied the weaker are the secretions into the duodenum.

As the acid chyme is neutralized soon after arriving in the duodenum by the alkaline pancreatic juice and bile, Cannon thought their absence would naturally prevent the neutralization of the chyme, and that this unneutralized acid chyme would prevent the pylorus from opening. The expulsion of food from the stomach would under these circumstances be much slower than normal. Cannon, therefore, ligated the larger pancreatic duct and the common bile duct in a dog, and found that after the operation the exit of food from the stomach was much slower than normally—one-fourth the normal amount passed out in an hour. It was finally found that by destroying the continuity between the stomach and the duodenum, gastric discharge was hastened. Hence, we see how closely together are linked the various agencies of digestion, and how beautifully nature performs her wonderful work.

Interesting work has been done by Cannon and others on intestinal peristalsis, showing that antiperistalsis is the normal movement of the ascending and transverse colon and that the colon possesses great absorbing power.

Therefore, in the treatment of digestive disturbances the best result will be obtained where the remaining forces of nature are utilized; where those whose energies are flagging are given an opportunity to recuperate; where others that are dormant need only to be aroused, and where still others that are destroyed are compensated for as best we can.

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The effects of the application of cocaine or adrenalin to the nose or throat may be prolonged by swabbing the parts after the application of the medicament with sterile vaselin. —*Amer. Jour. of Surgery.*

## PSYCHOTHERAPY.\*

By C. C. Beling, M. D., Newark, N. J.

The selection of a theme suitable for a presidential address before this society has been a matter of difficulty for me. After considering a number of subjects I thought I might be capable of presenting before you in a manner that would be interesting, I decided finally that it would perhaps be most advisable as well as opportune to address you on one that to-day seems to be of almost universal interest.

During the last few years much has been published both in lay and scientific journals on the subject of mental healing or Psychotherapy. Even to those of us who are more especially interested the task will no doubt be a Herculean one to encompass all this vast literary output.

As a student of this interesting subject I have endeavored to note how far from a practical and clinical standpoint its principles may be profitably employed in the treatment of those conditions which seem to need something more than the mere application of the principles of drug administrations and of the various physical means which we possess at the present day.

Psychotherapy is the treatment of disease by psychic methods. It is essentially a treatment by the mind and not of the mind in the same sense that electrotherapy is treatment "by electricity" and not "of electricity."

The methods employed are: Persuasion, emotion, suggestion, distraction, education, faith and exhortations. These are all comprised in the word "thought" and all it implies. Psychic methods should be considered in the same way that all other methods are in the treatment of disease. They have thus been used from time immemorial.

Bereft of speculation and transcendental philosophy psychotherapy has its relative values among other curative methods. With this fact in view we may apply its principles in a sound and reliable manner and obtain results in keeping with its limitations.

While studies in hypnotism and suggestion opened up new horizons in the field of mental therapy they likewise so absorbed medical and lay attention that it

was thought possible to replace the entire field of psychotherapy by suggestive therapeutics. When it was found that suggestion in certain cases was fraught with inconveniences and dangers not only hypnotism but all mental healing was condemned.

It is generally admitted that there are two mental spheres, the conscious and the subconscious. The conscious, according to present conceptions, is the seat of the higher faculties of judgment, will and ideation; the subconscious, that of the emotions, feelings and instincts.

In other words there are two psychisms; a superior and an inferior. Corresponding to these two psychisms there may be established two forms of psychotherapy; a superior and an inferior. Distinguishing between a superior and an inferior psychic function, it is equally clear that there must be two sets of psychic centers—a superior situated in the prefrontal lobe and an inferior occupying the other regions of the cortex.

In the normal state these two orders of psychic centers are associated, interwoven in their functions and collaborate so inextricably that it is impossible to distinguish the special role each one of them plays. In sleep and in distraction such as hypnosis and somnambulism a disjunction between these two spheres takes place and they then functionate separately. These conditions permit us to make analytical studies.

The fundamental distinction between the two psychisms admitted it will be understood that there are two forms of psychotherapy according as the inferior psychism alone or the superior or rather both psychisms are simultaneously addressed.

Inferior Psychotherapy (subconscious mind-cure) is applied to the inferior centers. It is known as Suggestive Therapeutics. To apply it the two psychisms must first be disassociated or separated from one another. This is done by hypnotism and predicates a preliminary hypnosis of the subject.

A patient presents a number of symptoms which are dependent upon an unconscious fixed idea; that is, the existence and nature of this pathological fixed idea is unknown to him. The physician can only ascertain the effects, which he is unable to remove as he is unaware of the cause. Under hypnotic sleep the fixed idea located in the subconscious realm is attacked and destroyed. On

\*Presidential address delivered before the Morris County Medical Society, March 9, 1909.



awakening the patient is cured. Hypnotism may act in two ways upon a patient: (1) by the dissociating effect of the sleep it produces; (2) by the suggestion to which the patient is susceptible through the use of the procedure *per se*.

In hypnotism employed purely as a therapeutic measure suggestion plays a role and it is not possible to separate it from suggestive therapeutics. The introduction of a new idea into the subconscious has the effect of destroying the morbid idea by replacing, disordering or correcting it. The object of such treatment is to supplant the morbid idea by the idea suggested.

Therapeutic suggestion can modify motility, sensibility, subconscious ideas and even the functions of those mechanisms ordinarily under the control of the will. The effect is psychic and is exerted upon the inferior psychism. This is true even of suggestion in a wakeful state. This form of suggestion should not be confounded with treatment by persuasion, education and general psychic action upon the totality of psychic centres.

Effectual suggestion is never made in a state of complete wakefulness. The subject to whom suggestions are made is only apparently in a wakeful state, but in reality he is in a condition of partial hypnosis without presenting the external signs of sleep.

The indications for this form of treatment are limited. We cannot expect to cure a hysteria or a psychasthenia by this means, but we can modify such diseases by removing certain of their symptoms, e. g., paralysis, contractures, aphasias, etc.

Very often there are distressing symptoms in these cases, which retard or even prevent the treatment of the patients. It is then useful under such conditions for the physician to be able to resort to such a valuable measure as hypnotic suggestion.

Under superior psychotherapy is included all other forms of treatment. It is an appeal to both psychisms, fortifies their unity and collaboration and endeavors to increase the power of the superior mind (centres) and its influence upon the entire life of the subject.

All of us in our practice make use of this form of psychotherapy, sometimes knowingly and at other times unknowingly. This phase of the subject is best studied in the works of Freud, Dubois and others. The use of this method of treatment will depend upon the degree of alter-

ation which has taken place in the superior centres. If these are profoundly affected, if the patient believes his delusions, if he admits the reality of his hallucinations or his false perceptions, the most effective psychotherapy will accomplish little or nothing. It is, therefore, not a method for the treatment of true psychoses or of interned lunatics.

It is on the contrary a treatment par excellence of the psychoneuroses, conditions characterized by mental weakness, facile subconscious dissociation, the easy surrender of the conscious and the frequent predominance of the subconscious.

Briefly stated, the principles which govern superior psychotherapy are:

(1) To lead or guide the patient away from an unhealthy idea, sensation or emotion, so that he will not arrest his voluntary attention upon it.

(2) To induce him not to take his morbid ideas and sensations into account in the organization of his life and the direction of his acts.

(3) To show him clearly the object to be attained.

(4) To regulate his environment.

Relative to alcoholism and drug habits some authors claim they can cure them by hypnotism. In a certain number of cases good results may be obtained. The mechanism of such successes should be understood.

Suggestion does not produce a systematic re-education of the will or increase the will power of the drunkard or habitue. It can act beneficially on the will by freeing the subconscious of a bad habit which checkmates the will. In such cases, however, the subject should have a sound will, which will assert itself when the bad automatic impulse is controlled.

On the contrary, it most frequently happens that the alcoholic is a weakling whose superior centres lack resistance and energy. The force of his will and personality should be strengthened against the poison. The entire mentality should be reached by reasonings and moral and hygienic methods in order that his superior centres will govern his acts and resist the insults of the subconscious.

The concluding paragraph of an editorial which appeared in the *Journal of the American Medical Association* of December 26th, 1908, is well worthy of quotation:

"One point, however, must be insisted upon: the incorrectness of the prevalent

belief that the control of bodily conditions by mental influences and the converse has been reserved for the last decade or two to discover and utilize. There has never been a period in the history of medicine in which psychotherapy has not formed part of actual medical practice—more or less superstitions, perhaps, in keeping with the age. This association of empiric practice based on unknown principles with known and recognized superstition has tended in the past to make physicians of scientific tendencies skeptical as to the value of mental therapeutics; and this disdainful neglect by the strongest element of the profession has in its turn left the field of mental therapeutics open for the occupation of numerous irregular cults. The problem now before the profession is to restore psychotherapy to its true place without allowing it to usurp that belonging to other therapeutic methods."

This, in my opinion, sets forth admirably what the attitude of the profession should be.

A neurologist recently writing on this subject says: "It is evident (1) that the mind has a not easily calculated influence over the body, beneficial or prejudicial, (2) that this influence is being utilized by many persons outside the medical profession, and (3) that ignorance or neglect of the important part played by moral treatment in the cure of nervous diseases tends to discredit physicians."

In conclusion, the consideration of this subject forces upon me a reference to its relations with religion. It suffices to say that religious belief is a thing apart from psychotherapy. The principles of psychotherapy hold good no matter what the creed, doctrine or belief may be, no matter whether the individual be a Hindoo, Mahomedan, Buddhist, Confucianist, Zoroastrian or Christian. As a scientific practice it yields scientific results.

Religion undoubtedly is, next to hypnosis, a most powerful influencer of the subconscious. To those who have been accustomed to training to religious ministrations the consolations of the priest and servant of God are as a balm in Gilead. The benefits of such services are daily seen in the wards of our hospitals whether given by Catholic priests or Protestant clergy.

I shall not discuss at any length the relation of the church to mental healing. I consider psychotherapy is rightly medical practice. As a purely spiritual minis-

tration the co-operation of the clergy may be valuable in the treatment of patients suffering from certain nervous disorders provided their training and upbringing render them capable of receiving such benefits.

"Faith can remove mountains and it matters little on what it is based or how it is excited. As John Hunter has told us, the touch of a dead man's hand has charmed away a tumor. But there are limits to its action and, while willing to accept faith as an adjuvant, no one who knows anything about disease will admit that by itself it can heal any but the ailments the origin of which lie hidden in the unknown recesses of the nervous system. By all means let us know the full power of the spirit over the body. Only let us have facts that can be fairly and fully tested."

### **DUCT PAPILLOMA PAPILLARY CYSTADENOMA OF THE BREAST.\***

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Not discussed at all in most text-books, or dismissed in a few words in others, this subject is treated very imperfectly even in the latest systems of surgery. This is strange since the statement is made there<sup>1</sup> that fully fifty per cent. of these comparatively benign growths have been seen to undergo malignant degeneration; and it seems natural that a more generous attention be accorded a growth with such possibilities, all the more since we know that the treatment by radical or even simple excision of the breast is usually curative.

Definition:—While histologically the duct papilloma is nothing more than what could be covered by the term papillary cyst-adenoma of the breast, the definite symptom complex, its unvarying diagnostic features, its differential points make it a clinical entity, the diagnosis of which should be made without a doubt and the treatment carried out accordingly. While I shall go more freely in to the precise histological features of the tumor later, the duct papilloma can best be described as a papillary outgrowth, causative of, or

\*Read at the meeting of the Hudson County Medical Society, April 6th, 1909.



present in a retention cyst, the walls of which are those of one of the larger lactiferous tubes emptying at the nipple; usually benign in character, but with malignant tendencies in some cases and mostly accompanied by a definite symptomatology which makes its recognition comparatively easy.

History:—As early as 1829 Astley Cooper<sup>2</sup> described the so-called "Hydatid Diseases of the Breast," the histories of some of his cases being evidently those of the condition under consideration. But it was in 1840 when Brodie<sup>3</sup> in his "Lectures" gave the first clear description of the pathological findings and the clinical features of the disease. In this period, before the exact microscopical studies of the later date, his observations on the gross specimens are marvellously acute. He states p. 139. "There seems to be little doubt that these cysts are originally formed by a dilatation of the lactiferous ducts. In one of the preparations on the table you will perceive a bristle introduced into the orifice of one of these tubes opening on the nipple which has passed into a cyst, and it is not uncommon to find that by pressure on the tumor the fluid may be made to escape by the nipple so that you may even expel the whole of it;" p. 141, "you will observe that one-fourth of its cavity is occupied by an irregular shaped excrescence attached to one portion of its internal surface." In this way he goes on to describe four cases of the condition. However it was not clear in his mind, for he continually confuses this condition with others of a different histologic type as will be seen later. In fact this confusion lasted several decades, until, while the exact position of the duct papilloma was cleared up, the question of its etiologic formation acquired the ascendancy. Following Brodie, Birkett<sup>4</sup> reported in detail five cases of the condition; but like his predecessor was unable as yet to differentiate them from the cystic disease of the breast of Cooper, now called Reclus' disease or abnormal involution cysts of the breasts (Warren). Paget<sup>5</sup> also mentions the disease but describes no cases of it definitely and fails to differentiate it from the cystic degeneration of the involuting breast, both processes being to him and his predecessors simply comparative degrees of the same histologic condition. Rogeau<sup>6</sup> in 1874, in his Paris thesis, is the first to definitely describe this "a special va-

riety of retention cysts of the mammary gland," to detail the microscopic and chemical elements of the nipple discharge and narrate definitely the clinical history of two cases. The clinical symptoms on which he insists are those of to-day "a conical tumor, fluctuating; starting under or beside the nipple and radiating outward like a hardened cord, alternately filling and emptying its contents by a flow of sero-sanguinous fluid from the nipple; the absence of adhesions to the skin or the deeper structures; no general metastatic processes and no, or little, pain." Earlier in 1858 Velpeau<sup>7</sup> had recorded two similar observations fulfilling the same diagnostic requirements but he failed to fit cause and effect together and therefore did not recognize the clinical entity of the condition.

Following Rogeau, Labbe and Coyne<sup>8</sup> discussed the condition and recorded another case, but while they and the French school held to the theory that these cysts were retention cysts following the blocking up of a duct by a papillary growth, Butlin<sup>9</sup>, p. 559, points out that "the intracystic growths probably owe their origin to the same epithelial irritation which at one point leads to a secretion of fluid and at another point leads to a proliferation of cells and to the formation of papillary growths."

In 1880 Gross<sup>10</sup> classified them under the adenomata but it is not until 1888 that we first meet the term "duct papilloma," in Bowlby's<sup>11</sup> article on "cases illustrating the clinical course and structure of duct cancers and villous carcinomas of the breast." This title shows what view he and other English writers as Bryant<sup>12</sup>, Shields<sup>13</sup> and Williams<sup>14</sup> took of these tumors. Reading their illustrative cases in the light of our present knowledge, we feel certain that they have confounded the benign and malignant forms of similar conditions without bounds. On the other hand the followers of Virchow, Sasse<sup>15</sup>, Schimmelbusch<sup>16</sup> and Tietze<sup>17</sup>, while redefining it as cystadenoma papillare, intracanalicular cystadenoma or papillary cystoma, again failed to differentiate the duct papilloma condition from the involution cystomata and malignant degenerations and looked upon them all as simply degrees of the progress of the disease. In 1904 Stewart<sup>18</sup> stated that at Johns Hopkins Hospital, Bloodgood had reported that "out of 510 hospital patients admitted with

breast diseases only 32 had simple cysts, 8 had cysts with intracystic growths, 5 had cystic adenomata, 2 dermoid cysts and 24 had adenocarcinoma arising from cystic adenomata, and 8 had cancer cysts, the simple cysts being less than 50 per cent. and that it was found impossible to diagnose many of the cysts without exploratory incision."

In 1905 Ill<sup>19</sup> published a clinical and pathological report of eight cases which he had observed independently and arrived at the correct diagnosis without knowing of these previous investigations, and he points out that the characteristic sero-sanguinous discharge was pathognomonic of the affection.

However, the classical article of Warren<sup>20</sup>, read as the oration on surgery at the Portland, Ore., session of the American Medical Association, finally settled the classification of these tumors pathologically and clinically. Based on a series of 758 cases of breast tumors observed at the Massachusetts General Hospital and in private practice, while he found 517 carcinomata in the series, there were only 12 of the condition under discussion, to which Greenough and Simmons<sup>21</sup>, in 1907, added eight more. In the past year Bloodgood<sup>22</sup> gave an authoritative statement of his observations and results and we must now look upon the existence of the duct papilloma, the papillary cystadenoma of the breast as a clinical entity, as justified.

Histology—Before entering upon the pathological description of the cystadenomata, it is essential to point out once more that they, like all other mammary tumors, depend on some perversion of one of the two main histologic elements composing the breast. Upon the predominance of the one or the other of these elements depends the type of the benign or malignant new growth, the other element playing but a meager part in the tumor formation. In the classification of Warren, the fibro-epithelial tumors of the breast are divided into the fibrous and epithelial types, of the latter of which the papillary cystadenomata form a very important and comparatively not infrequent portion. In these tumors the epithelial element is paramount, the fibrous tissue serving merely as a ground or network for the maintenance of the blood supply necessary for their subsistence and growth; while typically single, these tumors may be multiple, but their position is almost invariably near

the nipple in one of the milk ducts, the epithelial lining of the cyst being identical and continuous with the epithelium of the duct at the nipple. From some one point in the cyst wall a small pedicle branching out into many villi arises, each separate villus having a connective tissue core covered with ductal columnar epithelial cells, the whole constantly bathed by a serous or sero-sanguinous fluid which may or may not escape by the nipple, depending on the patency of the duct, although in most cases this discharge, spontaneously or under external pressure, is present invariably. The epithelium shows no tendency to infiltrate the surrounding tissues. However Greenough and Simmons reported the finding of malignant degeneration in the pedicle in fourteen per cent. of the cases, and Bloodgood<sup>23</sup> claims that the degeneration took place in fifty per cent. of the cases observed at Johns Hopkins Hospital. The periductal fibrous tissue was usually in excess; this point may be of importance in the etiology of these cystic tumors, for many writers since Velpeau in 1858 have held that trauma producing such periductal fibrosis led up to a partial occlusion of the duct and a cyst by retention, and the resultant irritation on the lining epithelium caused its proliferation at one or more points as villous growths. "Whether in developing the polypoid outgrowth from the wall of the ducts produces the cysts or whether the cyst is first produced and the papillary outgrowth is a secondary process, can only be a matter of speculation." In some of the cases examined by these writers — Greenough and Simmons — the breasts showed involution changes, which is not surprising when the age of the patients affected is taken into consideration. They and the most of the other pathologists agree well on this point, however, that the origin of the papillary cystadenoma was certainly in the fibrous tissue and the epithelium of the walls of the larger ducts.

The one feature in the case histories of these tumors is the slow growth and this is well borne out by the fact that the evidences of rapid proliferation in the cells, such as mitotic formations, are very uncommon and not found in our specimens at all; but trauma and degenerative changes in the papillae are detected both macroscopically and microscopically by hemorrhagic or discolored areas in the fresh gross specimens and the sections under the scope. These same hemorrhagic



areas and discolorations were visible in the walls of the cysts. In one of our cases, the condition was identical with the one pictured by Bowlby in the St. Bartholomew's Hospital Reports (1888) and described as "sprouting into the cavity of the cyst was a small pedunculated papillomatous mass bright red in color and looking like a ripe raspberry." In the cases under observation by us there had been no axillary gland involvement and this is the rule, although in the series of Greenough and Simmons the axillary glands were enlarged in two cases. They did not show any malignant involvement even in the cases of carcinoma.

**Clinical History and Symptoms**—To clear up the diagnostic features, I report from the histories of the two patients admitted to the Women's Hospital, St. Michael's Hospital, Newark, the salient points of the cases:

Nora C., Rahway, N. J., admitted March 14th, 1908, 46 years of age, native of U. S. A., married; father died at 50 of carcinoma of the intestines, mother living at 67. Has had one child and one abortion at three months five years ago. Five years ago she noticed that the right nipple discharged a watery fluid which after two years changed to a sero-sanguinous discharge. Four years ago she noticed a small white lump growing near the nipple. This grew more rapidly during the past year. Operation by Dr. E. J. Ill, simple excision of the breast and tumor. Discharged well March 26th, 1908.

Case 2.—Ella S., colored, of Matawan, N. J., admitted February 26, 1908, 43 years of age, married, native of the U. S. A., has had seven children and one abortion. Five years ago patient struck her breast and this was followed shortly by a dull pain with a reddish serous discharge. At the nipple of the left breast in a direction from above downward is a mass of the size of a small egg. A sero-sanguinous discharge from the nipple follows the manipulation of the examination. Operation by Dr. Charles L. Ill. Incision radiating downward from the nipple about one and a half inches into the cyst cavity and enucleation of the papilloma. Cured away the cyst wall and packed with gauze. Discharged well March 12th, 1908. In December the patient returned to the clinic with the discharge again appearing from the nipple. Microscopical examination of this discharge shows that "it consists chiefly of fat globules, a few cuboidal epi-

thelial cells, few degenerated leucocytes, a few red cells. No bacteria were found."

In the light of our present knowledge, coupled with the fact that this patient has a recurrence of the thick grumous discharge of the same character as before the operation, the excision of the breast would be the right treatment; for while our experience justifies us in looking upon these cases as absolutely or relatively benign, the findings of the pathologists of Johns Hopkins Hospital and the Massachusetts General Hospital must make us pause before again resorting to simple incision of the cyst, which even in Bryant's time, when that was the usual method of procedure, it was followed by malignant recurrences that in a few cases ended fatally.\*

To return to our symptoms individually. First of value and in most cases when taken with the rest of the symptom complex absolutely pathognomonic is the discharge from the nipple. This has been many times described and analyzed. It is a sticky, serous fluid varying in color from a watery yellow to a deep rose and even a chocolate brown, which microscopically presents fairly definite findings. There are a fair number of flattened epithelium, a few leucocytes, a few or many red blood cells, some fat globules (which the earlier writers called the corpuscles or Gluge), and some fine fibrinous material; occasionally cholesterol plates may be found. This discharge is almost always present; certainly so if the patency of the duct to the nipple is assured. Bloodgood makes the statement that a "discharge from the nipple, except during lactation, may be looked upon as a sign of a benign lesion and not a symptom of cancer. If the discharge is blood or cloudy serum, this is a positive sign of a cyst with an intracystic papillomatous growth." In these cases the appearance of such a discharge precedes by months or years the discovery of the cystic tumor, and in the absence of pain or other features pointing to a carcinoma, such tumors should be looked upon as benign.

\*This patient has since come to operation, and the whole of the gland has been removed. The pathological examination is not ready as yet.

\*Since reading this paper I have, by the courtesy of Dr. L. W. Bagg, had the opportunity of seeing and assisting at the removal of a tumor of this type from the left breast of a man of 63 years of age, whose history showed the tumor for the last four years and the typical sero-sanguinous discharge from the nipple for the last half year. The specimen is one of the typical duct papilloma.

However, while rare, there may be a discharge from the nipple in cancer of the breast; a fact that has led Finsterer<sup>24</sup> to cast discredit upon the value for differentiation of this symptom. The differentiation from the involution cystic disease of Reclus is very much more difficult because discharge of the usual character is occasionally seen here, too. However, the character of the growth, its diffuse nodular feel, its position more on the outskirts of the breast, tend to stamp the involution process. So then I think one is justified, *caeteris paribus*, to feel that these papillomata are benign and may be so treated.

The rate of growth of these cystadenomata is very slow. In both of our cases the disease was noticed five years before consulting a surgeon, and that explains why so many of the cases reported previous to 1900 were at times so large before removal or incision.

The situation is also of diagnostic value. The growth under consideration being one of the larger ducts, its usual site is near, alongside of, or radiating from the nipple; either globular or frequently elongated, conical; this differentiates it from the simple and rarer periductal fibroma and from the simple cyst, both likely to be found in the periphery of the breast rather than near the nipple or the areola. The skin is usually uninvolved except when the tumor has reached such a size as to distend the overlying skin, when it may adhere to the cyst wall. The underlying structures are not involved except under the same conditions; of course if there is a carcinomatous degeneration of the papillomatous pedicle, or where the papillomatous mass has adhered to the cyst wall and broken through, the clinical and pathological conditions are entirely different and to go into them would go away beyond the limits of my paper; it may suffice to mention that "the distinct wall beneath the base of the papilloma is lost and replaced by solid cancer tissue; the papilloma has lost its characteristic lobulated surface and usually looks like a soft medullary carcinoma."

**Etiology**—A definite etiology it is impossible to give. Trauma, mastitis, lactation, marriage, celibacy, all are of no definite moment or of impartial incidence.

**Age**—Those in the fourth decade and after are most likely to be predisposed, but it may be found in the very young as well as the very old women and even in men.

**Treatment**—Taking into consideration

the possibility of malignant degeneration as proven by the microscope, the excision of the breast seems the only right indication. I would even endorse Bloodgood, who says that incision of the tumor should precede the immediate operation to determine the advisability of the radical amputation as for malignancy; and these valuable points are of importance in this connection. He states that "the simple cyst which may arise at any stage of senile parenchymatous hypertrophy has a distinct wall, a smooth inner surface and non-hemorrhagic clear or cloudy contents. The cancer cyst which has been observed in both the lactating and non-lactating breast has a thicker wall, less differentiated from the surrounding breast than the simple cyst, hemorrhagic contents without a papilloma to explain the hemorrhage, or thick, grumous granular contents due to broken down cancer cells. A smooth walled cyst, without a papilloma, containing blood, has, in my experience—6 cases—invariably been carcinoma."

Of course, in the light of his own experience, Dr. Ill, who reports having seen spontaneous retrogression, is justified in pronouncing these cases "absolutely" benign, but the fact that there is a recurrence in one case treated on that theory is to my mind proof that amputation of the breast is, while more mutilating, still the ultimately least dangerous procedure.

In conclusion I wish to express my thanks to Drs. E. J. and C. L. Ill for permission to report these cases, and to our pathologist, Dr. Harden, for the assistance in the preparation of the sections and the photographs in the body of the paper.

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- This makes a list of cases including those here reported to the number of eighty.

## Clinical Reports.

### RECURRENT IRIDOCYCLITIS.

**Histories of Patients Who Have Been Under Observation for Periods Varying from 15 to 20 Years, With Remarks on the Etiology and Treatment of the Disease.**

By **Charles J. Kipp, M. D., Newark, N. J.**

It is a well-known fact that Iritis or Iridocyclitis is prone to recur from time to time and that much damage to vision often results from such repeated attacks. Not all patients who have had an attack of Iridocyclitis are however subject to a recurrence. I have known of many people who were under my treatment more than 30 years ago for attacks of this disease and who have not had another. Among these patients were many who suffered from rheumatism, acute and chronic. I have notes of a case of iridocyclitis of one eye occurring in a man 31 years of age who had been confined to his bed by rheumatoid arthritis of nearly all the joints for 16 years. The attack of iridocyclitis was severe, but yielded to treatment. During the remainder of his

life, 8 years, he remained free from eye disease.

I have notes of many cases of syphilitic iridocyclitis, in which the attack was not followed by another during periods varying from 20 to 30 years, or as long as they lived. I know also of many cases of iritis which were thought to be due to gonorrhoea in which no recurrence took place during 20 or more years while they were under my personal observation.

Every practitioner has observed such cases and it is difficult to understand why in individuals with apparently similar constitutional diseases, recurrence of the eye disease is frequent in some and absent in others. In some of my cases in which attacks of iridocyclitis occurred in the one eye or the other every year or two, no constitutional disease of any kind could be discovered by the most painstaking observation. In former years we called such cases idiopathic iritis, now they are spoken of by many as auto-intoxication iritis and are regarded as due to an intestinal auto-intoxication. This sounds very plausible, but if an intestinal auto-intoxication was present, its manifestations were limited to the eye, for the patients claimed to be in perfect health at the time of the recurrence of the eye disease. In the great majority of the cases of recurrent iridocyclitis which have been under my observation for many years, rheumatism or at least rheumatic pains in the joints or muscles, or both, were either at the time of the recurrence or had been present some time before the attack. In what proportion of these cases gonorrhoea was the cause of the rheumatism I am unable to state. I know that in some of the cases rheumatism was complained of before the gonorrhoea was contracted. As there are no signs by which we can differentiate the iridocyclitis due to different constitutional causes, we cannot in any particular case say positively that gonorrhoea was the cause. I have seen cases of iridocyclitis in men who had gonorrhoea, but who had not at the time and had never before had rheumatism. Syphilis seems to be less often the cause of recurrence than either rheumatism or gonorrhoea.

Recurrence of attacks of iridocyclitis are seen as often in eyes free from adhesions between the pupillary margin and the lens capsule, as in eyes in which such are present as the result of an iridocyclitis. In patients with posterior synechiae in

only one eye, I have seen as many attacks in the eye free from posterior synechiae as in the eye with them. But the effect on the vision is certainly more deleterious in eyes with posterior synechiae than in those without them. Opacity of the lens, and opacities in the vitreous are nearly always seen in such eyes after repeated attacks. On the other hand, I have notes of many cases in which the attacks in eyes without posterior synechiae, retained good vision after many attacks, provided the attacks were vigorously treated from the very beginning of the attack. The only change observed in such eyes is a gradual atrophy of the iris stroma and the pigment layer. This sometimes is so marked that a red reflex is obtained through the iris when the ophthalmoscope is used.

In some of the cases, extravasations of blood in the retina occurred, but whether or not this had any connection with the disease of the iris and ciliary body, I am unable to state. Such extravasations are frequently enough seen in people of, and beyond, middle age, who have never had an attack of iridocyclitis. With or without the iridocyclitis, hemorrhages in the retina are mostly due to a sclerosis of the vessels of the eye. Nephritis developed in several of my patients, after they had had several attacks of iridocyclitis, and in some of them albuminuric neuroretinitis developed subsequently.

#### TREATMENT.

Patients who have had one attack of iridocyclitis must be warned that they are liable to a recurrence of the disease and be urged not to delay treatment as only by the prompt application of the proper remedies posterior synechiae can be prevented. Our aim must be to obtain a wide dilatation of the pupil and to keep up the dilatation till all inflammatory symptoms have subsided. In most cases this can be accomplished by instillation of the 1 per cent. solution of sulphate of atropin every 2 or 3 hours for the first 48 hours and less frequently thereafter. Other mydriatics such as scopolamine and duboisine are used by me only when there exists an idiosyncrasy to atropin. Scopolamine is a very poisonous substance and should not be used in solution of more than  $\frac{1}{2}$  of one per cent. I have seen poisonous effects even from this strength of solution. The action of the mydriatic may be hastened by the use of

dionin in substance or in solution. I usually use a small quantity of powder, a piece as large as a small pin's head, which I place on the conjunctiva of the lower lid. I use it only once daily, others use a solution of 2 to 5 per cent. several times daily. Cocaine hydrochlorate in 2 to 5 per cent. solution is also useful in hastening the effect of the atropin and also in relieving the pain. It may be combined with the atropin solution. In some cases I have used a solution of adrenalin chloride 1:1000 in connection with the atropin and cocaine and apparently with excellent effects. If the attack is accompanied by much pain the application of leeches to the temple has seemed to me to do more to relieve the pain than anything else. If necessary the leeches may be applied several times at intervals of several days. Warm water poultices to the eye are also useful in cases with much pain. Internally, I usually give at first a brisk cathartic and follow this up with the salicylate of sodium in moderate doses, and if this is not tolerated by the stomach try aspirin or salol. Later on—after the acute symptoms have subsided—I give iodide of potassium. I have found Turkish baths taken at intervals of a few days, often hastens the absorption of the exudate in the anterior chamber and in the vitreous. Paracentesis of the anterior chamber undoubtedly hastens the recovery, and in connection with instillation of dionin is necessary in cases with increase of tension, but should not be undertaken by any one not thoroughly familiar with surgery of the eye. In the intervals between the attack, the constitutional disease, if any is present, should, of course, receive attention. My own experience in this line is not encouraging as to the entire prevention of recurrences, but I think that I have noticed diminished severity of the attacks, if the constitutional trouble was kept in abeyance.

#### CASE I.

##### TEN ATTACKS OF IRIDOCYCLITIS IN 22 YEARS.

Mrs. M. N. aged 50, born in Ireland, in good general health, is the mother of many children; no history of syphilis; no rheumatism; no gout. Consulted me for the first time May 3, 1883. She stated that while under treatment elsewhere for hypertrophy of the turbinated bodies of the right side of the nose, the right eye became red and painful several days ago. The inflammation has steadily increased



since then, and the pain is now so severe that she cannot sleep at night. I found much circumcorneal injection, numerous fine short opaque lines in all layers of the cornea, and a rather thick deposit of small greyish dots on Descemet's membrane arranged in the shape of a pyramid, with the apex toward the centre of the cornea. The aqueous was cloudy. The iris was of about the same color as that of the left eye. The pupil was smaller than that of the left eye, and a few posterior synechiae could be made out. The cloudiness of the media prevented an ophthalmoscopic examination. The vision of this eye was not tested. Tn. V. F. intact. The left eye was normal Hm. 1 D. S. 6/5.

I prescribed leeches to temple, a 1 per cent. solution of atropin sulph. for instillation every two hours and gave her the salicylate of sodium in 10 grain doses, every four hours. The inflammation subsided gradually under this treatment.

On June 14, the eye was about normal in appearance. An ophthalmoscopic examination made at this time showed slight cloudiness of the vitreous and a patch of atrophy of the choroid, just below the macula lutea; it was about the size of the disc; otherwise the fundus was normal. The palpebral conjunctiva was covered with granulation. I stopped the atropin drops and gave her internally potassium iodide in 5 grain doses three times daily.

March 26, 1885. Consulted me for severe pain in her right ear. I found that she had an attack of acute otitis media with serous exudation in the tympanic cavity. Under treatment this passed away, to be followed by a series of furuncles in the external canal.

April 21. Has now another attack of sero-plastic iridocyclitis of right eye. Symptoms about same as in first attack, but more posterior synechiae. No cauterization of nose has preceded this attack. I gave her the same treatment as in the first attack, having forgotten that atropin conjunctivitis followed the instillation previously.

April 24. Has a severe attack of atropin blepharo-conjunctivitis. Pupil is widely dilated. Vitreous cloudy. Substituted duboisine for the atropin.

May 3. The eye is again normal in appearance. No more conjunctivitis. Stopped all treatment.

October 9, same year. Another attack

of sero-plastic iridocyclitis of the right eye. The appearance of the eyes is about the same as in previous attacks. Ordered solution of atropin and salicylate of sodium as before. Three days later returned with a severe attack of atropin blepharo-conjunctivitis. Discontinued the atropin and substituted solution of duboisin. Under this treatment the attack passed away. Six weeks later the eye was again about normal in appearance.

During the following eight years she was entirely free from eye trouble.

On September 8, 1893, she had another attack of sero-plastic iridocyclitis of right eye. This passed away in the course of a month under the treatment previously given her. The instillations of duboisin did not produce a conjunctivitis.

December 12, 1894. Has not had an attack of iridocyclitis since last report. Has none now. She comes because she thinks that she has a foreign body in the right eye. I found an eyelash in the conjunctival sac. There is no sign of iritis. The pupil of the right eye is larger than that of the left but reacts well to light. The lower outer sector of the iris is so thin that light passes through it. The vitreous is slightly cloudy. The lens has some dark lines in the outer layers in nasal half. Fundus as before.

June 1, 1896. Another attack of sero-plastic iridocyclitis in right eye. Treatment as before.

June 9. The inflammation has nearly subsided.

July 9. All signs of inflammation have passed away. Fundus slightly veiled.

April 30, 1897. Returned to-day with the statement that the left eye is painful since a few days. Careful examination failed to reveal anything but a mild catarrhal conjunctivitis of this eye. The right eye was not affected. I found R Hm. 2.25 D. S. 6/6 L. Hm. 2.5 D. S. 6/5. Both Tn. V. F. intact.

July 7, 1897. Has now another attack of sero-plastic iridocyclitis in right eye. Symptoms as in previous attacks, perhaps more than usual number of opaque lines in cornea. The attack lasted about four weeks.

August 26, 1899. Another attack of sero plastic iridocyclitis in right eye. This also passed away in about a month under the usual treatment.

May 21, 1903. Has been free from this iritis since last report. Now has another attack in the right eye. There is not

much circumcorneal injection. The deposit on Descemet's membrane is pretty thick. There are several old posterior synechiae but no new ones have formed. Ordered instillation of 1 per cent. solution of atropin alternately with instillation of a 1/5 per cent. zinc sulphate. A month later the attack had passed away. No conjunctivitis was produced by the instillations.

November 9. Right eye was free from inflammation up to yesterday. There is now chemosis of lower half of eye-ball. Not much circumcorneal injection. Cornea hazy all over and full of opaque stripes, running mostly in vertical direction. The iris is not much discolored, pupil is irregular, lens as before. Vitreous cloudy. Vision much reduced. Tn. V. F. intact. This attack yielded to the usual treatment in the course of a month.

November 26, 1905. Has another mild attack of seroplastic iridocyclitis in right eye. There is faint ciliary injection. In the cornea are numerous fine opaque stripes running in all directions. Some deposit on Descemet's membrane. Aqueous cloudy. No new posterior synechiae. Opacity of lens increased. Has a great deal of supra-orbital pain and a sore throat. Tn. V. F. intact. The left eye is free from disease. Hm. 2.5 D. S. 6/5. Complete recovery in two weeks. Since then patient has not been seen.

#### CASE II.

##### SEVEN ATTACKS OF IRIDOCYCLITIS IN 18 YEARS.

Miss S. K. 30 years of age, a stout well developed woman, who is now and always has been in good general health, was seen by me for first time January 27, 1876. The right eye was normal in appearance. Hm. 2 D. S. 5/5.

The left eye was very painful. There was much circumcorneal injection and some swelling of limbus. The cornea was clear. Aqueous was very cloudy. Iris was swollen. Pupil was moderately dilated from atropin which had been prescribed by another physician. There were no posterior synechiae. Vitreous cloudy. Fundus normal. Tn. V. F. intact. Urine free from albumen and sugar. I ordered leeches to the left temple. Warm water fomentations to the eye. Instillation of a 1 per cent. solution of atropin every three hours and gave her 10 grains of sodium salicylate every four hours.

February 20. The inflammation has gradually subsided. Since first visit a circumscribed swelling about 2 mm. in diameter has developed in outer lower periphery of iris. The pupil corresponding to this point is slightly irregular. The iris is not discolored, its posterior surface at the point of swelling is flat.

February 27. The swelling in outer lower periphery of iris has disappeared, likewise the posterior synechia at that point. All signs of irritation have disappeared. Vitreous slightly hazy. L. Ht. 3.75 D. S. 15/20.

January 15, 1880. Up to yesterday both eyes were free from pain and inflammation. Vision was as good as before first attack of iritis. Since yesterday the left eye is again painful. There is considerable injection of both the conjunctival and episcleral vessels and some swelling of lower half of limbus. Cornea clear, Aqueous clear. Iris normal color. Pupil normal size and reacts promptly to light. Vitreous hazy. Fundus normal.

January 17. Eye is now painful. Intense circumcorneal injection. Cornea clear. Aqueous clear. Iris normal color and swollen. Pupil widely dilated from atropin. S 5/24 T-|-I. Gave a hypodermic injection of morphin sulph. gr. 1/6, which was followed by severe pain in neck, chest and bowels, lasting for half an hour. Ordered warm fomentations to eye which greatly relieved pain.

January 20. Less pain, less circumcorneal injection. Now numerous deposits on Descemet's membrane arranged in triangular form with apex upward. T-|-I.

February 10. All signs of iritis, including precipitates on Descemet's membrane have disappeared. Vitreous still hazy. Tn. S 5/12.

July 11, 1882. Another attack of serous iridocyclitis in left eye. Same symptoms as in previous attacks. T-|-I. Under treatment the attack subsided in about a month, leaving the eye in same condition as before the attack.

September 2, 1884. Another attack of serous iridocyclitis of left eye which like the previous ones was accompanied by a decided increase of tension, and subsided in the course of six weeks leaving the eye in the same condition as before the attack.

July 1886. Another attack of serous iridocyclitis in left eye but less severe than previous attacks. It passed away in



about three weeks without permanently damaging the eye.

In 1887 she had several attacks of episcleritis of left eye without apparent involvement of the uvea.

March 22, 1888. Since yesterday an attack of seroplastic iridocyclitis of left eye. Symptoms as before, except that there are now a few narrow posterior synechiae on lower margin of pupil. Upper part of pupil is widely dilated. Ordered instillation of eserine 1/2 per cent. solution with cocaine 5 per cent. Gave quinine in 10 grain doses twice daily, as tension was markedly higher than that of the other eye.

March 23. The eserine has not contracted the pupil. No abatement of symptoms. Vitreous cloudy. No detail of fundus can be made out. Ordered antipyrin for pain.

March 27. Eye is much less painful. Less circumcorneal injection. Aqueous still very cloudy. Pupil as before, the eserine has not reduced its size. T-|-I. Counts fingers at two feet.

March 28. Great improvement since yesterday. No pain. Aqueous much clearer. Pupil normal size. Vitreous still very hazy.

March 30. All injection of globe has disappeared. There is now a dense deposit on Descemet's membrane of usual pyramidal form; aqueous clear, vitreous nearly so; pupil is again a little larger than that of right eye. Tn. S 5/12. Discontinued eserine.

April 15. Left eye is now apparently in normal condition. Tn. S 5/6.

October 28, 1890. The left eye which has passed through many attacks of serious iridocyclitis has been free from attacks from inflammation since last entry and is now apparently normal. S 5/6 Tn. Since yesterday she has pains in the right eye, which has never before been the seat of disease. This eye has now an attack of seroplastic iridocyclitis. Considerable circumcorneal injection. Numerous small precipitates on Descemet's membrane in the usual triangular form. Pupil medium size. Vitreous cloudy. Fundus veiled, but apparently normal. T-|-I. S 5/60. Ordered instillation of pilocarpin hydrochlor. 4 per cent. every 2 hours, and gave salol in 10 grain doses every 4 hours.

October 30. Circumcorneal injection increased. Aqueous muddy. Pupil same size as before. T-|-I. Substituted eserine 1/4 per cent. solution for pilocarpin.

November 3. No pain; less ciliary injection. There is now an exudation in pupil forming a broad ring. Pupil of medium size. Substituted atropin for eserine which revealed a broad posterior synechiae below; otherwise pupillary margin is free. T-|-I.

November 30. Both eyes are now free from disease. R. & L. Hm. 2.25 D. S 5/6. Tn.

January 11, 1894. During last four years eyes have been free from inflammation. A few days ago noticed an impairment of vision in right eye. It seemed to her as if something was floating before it. She complained also of a dazzling sensation. The eye was free from signs of inflammation of outer parts of eye.

The ophthalmoscope revealed a marked optic neuritis. The optic papilla was much swollen and enlarged. The retinal veins were very full. S 5/6. Tn. The left eye was normal. I ordered leeches to the temple and gave her small doses of calomel. Examination of the urine showed it to be free from albumen and sugar.

Shortly after the last visit she was taken ill with some abdominal disease and Bright's disease, and died shortly after an operation for the abdominal disease.

### CASE III.

#### FIVE ATTACKS OF IRIDOCYCLITIS IN 21 YEARS

A. P. C. 40 years of age, a large and robust looking man, a teacher by occupation, consulted me for the first time April 24, 1886. According to his statement he had never been seriously ill and is at present in good general health. He had never had venereal disease, but has had sciatica and muscular rheumatism. His eyes had never been inflamed. He wanted relief from pain in his left eye. The right eye was normal in every respect. R.—1Dc—1Dc 45t. S. 15/15.

The left eye which had been very painful for a week was the seat of a severe iridocyclitis. There was much circumcorneal injection. In the cornea were many opaque lines running in various directions and there were many fine precipitates on Descemet's membrane. The aqueous was muddy; the iris was swollen; the pupil was contracted and bound down by many posterior synechiae. The condition of the media prevented a view of the fundus.

May 5, same year. Under the use of atropin and cocaine locally and the internal administration of sodium salicylate, the

attack has nearly subsided. The cornea is clear, the posterior synechiae are all broken up; the pupil is widely dilated, the vitreous is still cloudy, but fundus seems normal.

May 30. The left eye is now apparently normal.

June 2, 1891. Up to a few days ago, both eyes were entirely well. Since then the left eye has given him much pain. He has now a well-marked serous iridocyclitis of left eye, presenting symptoms like those of previous attack.

July 27. The left eye is again free from disease, L.—1.5D.c—2D.c. 45t. S. 15/30. Has some atropin irritation of conjunctiva.

April 18, 1899. Has been free from disease of eyes since last visit. Has now another attack of serous iridocyclitis of left eye. The symptoms do not differ from those of previous attack.

This attack lasted about five weeks and when it was over vision was no worse than before.

November 23, 1901. Up to yesterday his eyes had been about as good as ever. Since yesterday, the vision of the right eye, which had never before been the seat of disease, was somewhat impaired. The left eye was free from disease. Examination of right eye revealed numerous floating opacities in vitreous, otherwise its appearance was normal, with corrected refraction S 6/6. I prescribed potassium iodide and advised rest for the eyes.

January 1, 1902. The vitreous is much clearer than at last visit. S as before.

December 26, 1907. Since six weeks ago vision has been much impaired in the right eye. S=6/36. There are now numerous small round and striated extravasation of blood all over the retina and also some on the disc. The retinal vessels are of about normal size. The vitreous contains many floating opacities.

The left eye with corrected refraction has sight equal to 6/10. In this eye there are also floating opacities in the vitreous, but otherwise there is nothing abnormal. Since then the patient has not been seen.

(To be continued.)

It is almost impossible to successfully anesthetize a peritonsillar abscess. The patient should be placed under the lightest possible narcosis and the incision made rapidly while the head is suspended over the edge of the table.—*Jour. of Surgery.*

## Reports of County Societies.

### ATLANTIC COUNTY.

**Theodore Senseman, M. D., Reporter.**

A regular and largely attended meeting of the Atlantic County Medical Society was held in the Carnegie Library building, Atlantic City, on Friday, April 2d, 1909.

Dr. William E. Darnall, of Atlantic City, addressed the meeting. His subject was: "A Year's Work in Gynecology." Dr. William F. Ridgway spoke at length, and in a very interesting manner, on "Gynecology as Taught Abroad." The society received with deep regret the announcement of the death of Dr. Milton L. Somers, one of its most valued members.

### ESSEX COUNTY.

**Frank W. Pinneo, M. D., Reporter.**

The Essex District Medical Society held its ninety-third annual meeting Tuesday evening, April 6th, 1909, in the New Auditorium, Orange street, Newark. Two hundred and six members were enrolled present. The minutes of the last annual meeting were read, also those of four scientific meetings held during the year, as follows:

May 23, 1908, with an address by Hon. Champ S. Andrews on "Medical Quacks and Their Methods"; October 13, 1908, address by Surgeon-General P. N. Rixey on "Medical Work in the Navy"; December 1, 1908, an address by Mr. James Taylor Lewis, counsel for the New York State Medical Society, on "Malpractice Defense," showing the great value to both the medical profession and the public of an organized plan by our own State Society for the defense of its members; February 16, 1909, a paper by Dr. Haven Emerson, of New York, on "Laboratory Work in Physiology" as affecting medical practice. It was read by Dr. T. B. Barringer.

The treasurer's report, which called for an assessment of \$5, as the annual dues for the ensuing year, occasioned much discussion, but when it was shown that \$2 of this is the assessment of the State Society, and that \$250 had been spent by our county society alone in engaging counsel to draft a medical bill covering the license by the State of osteopaths and re-writing the law on medical practice (the bill known as No. 231), it was approved without opposition, though with the expressed hope that it would be appreciated that this item was for State, and not merely county, advantage. The leadership of the president, Dr. Eagleton, in the matter was approved, and his ardent work, with that of others, in furthering the chances of bill 231, at Trenton, was appreciated.

An auditing committee, Drs. Coit, Griffiths and McCormick were appointed.

The necrology committee reported the death (the day before this meeting) of Dr. Charles W. Hagen.

The committee on legislation made a summarized report.

The Council reported frequent meetings during the year. Its actions have been chronicled in these reports.

The president's address followed. Its sub-



ject was "Our Duties as a Society," and voiced the aims of his administration the past year, to do things as a society which would broaden our interest in things medical, which would benefit the whole profession in county and State, strengthen us as an organization, and encourage every legitimate practitioner to join our membership. That he met approving response was proved by the unusually hearty applause and unanimous vote of thanks which followed.

It was decided to increase the number of society meetings to seven in a year; also to lessen dues for new members joining after the beginning of a year.

The following were elected permanent delegates to the State Society: Drs. Eagleton, Gray, Buerman, Disbrow and Lippincott, and the following provisional delegates: Drs. Hagar and Dill. The following officers were elected: President, Dr. C. D. Bennett; vice-president, Dr. S. E. Robertson; secretary, Dr. Raph H. Hunt; treasurer, Dr. F. C. Webner; reporter, Dr. F. W. Pinneo; on the council, Drs. E. J. Ill, W. P. Eagleton, J. T. Wrightson, T. W. Harvey.

The following new members were elected:

Drs. Abraham J. Alexander, Robert J. Donnelly, Thomas J. Kelley, Erwin Reissman, Frank A. Roberts and Louis Schneider, of Newark; Mabel H. F. Bancroft, Emma O. Gantz, Edward LeRoy Menard and John E. Parker, of East Orange; George H. Cobb and Watson B. Morris, of South Orange.

#### HUDSON COUNTY.

##### August Adrian Strasser, M. D., Reporter.

The regular meeting of the Hudson County Medical Society was held at Lincoln Hall, on Tuesday April 6th, President Mooney, presiding. After the reading of the minutes of the last meeting the report of interesting clinical cases was started by the exhibition of a patient by Dr. Bogardus. This man had what the doctor termed Paget's disease, or senile rickets. He was 46 years of age, and perfectly well until six years ago. Then he began to have pain in his long bones, and since then there has been increasing disability. The long bones of the leg were softened and curved. The condition usually affected the spine, the long bones and the pelvis. All in all there were about eighty cases on record. Heredity played but a small part in the process, although the condition was at times found to occur in near relatives. General health was not usually affected, and life was not shortened thereby. Paget reported eight cases in 1877, of whom five in later life died of malignant disease. Therapeutics were very unsatisfactory. It was probably an anomaly of nutrition. The bone softening spoke most for this.

Dr. G. K. Dickinson detailed the history of the case of a girl on whom he had been forced to operate in the terminal stages of goitre, where the intervention ended fatally. The sister shortly after this patient's death developed thyroid enlargement, of the small knobby variety where the enfeeblement and no exophthalmos were the characteristics. Naturally he was averse to any operative interference for the present, so he had her sent to Dr.

Purdy for X-Ray treatment, with remarkable results so far. The pulse rate, which was usually above 140, was now only about 100. The growth has not appreciably increased. Her general health is a great deal better. He also reported a physiological phenomenon that he had the pleasure of witnessing lately. Both laboratory workers and operators had never been able to see the actual peristaltic wave of any of the hollow viscera. Even in opening for Cesarian section there was no contraction of the uterus visible to the eye. Recently, however, while doing a hysterectomy he found both extremities of the Fallopian tubes oozing blood and surrounding the tubes was a great deal of black or rather brown blood that was old. Suddenly there was a contraction starting at the circular muscles of the cornua, then the next more centrally placed fascicles contracted, and so until the middle of the uterus was reached. This covered the space of about ten seconds. Then came the relaxation during which each occurred. This continued until the operation was done.

Dr. George E. McLaughlin reported the autopsy findings in a man who died after an illness of only five days. He had complained of a mild sore throat and of a severe pain in the left arm. His temperature until death was always up to 105 F. There was some swelling of the neck. This and the pain in his arm and the high fever made the attendant suspicious of a severe infection. Several consultants were called, and two suggested respectively glanders and plague. Everything about his case was, however, negative. At autopsy the chest organs were found negative, the alimentary tract was negative also. The prostate which had given him trouble earlier in life was also found to be blameless. A partial blood examination before death had tended to show a septic invasion. However, when the dissection extended up to the neck the opening of the mylo-hyoid revealed a collection of pus smears which showed an almost pure culture of streptococcus. The diagnosis was that of an atypical case of Ludwig's angina.

Dr. McMorrough reported the results of the use of chloroform narcosis in the spasms of infants and young children. Dr. Koppel on the same subject discussed the probability of the use of the thyroid extract in these cases as many of them seem to be based on the existence of enlarged thymus glands.

Dr. Pollak reported a series of fifty-seven cases of pulmonary hemorrhage where he had achieved a cessation thereof by following the advice of Dr. Solis-Cohn and using small doses of calcium chloride at frequent intervals. In discussing this Dr. Dickinson said that he had used the remedy, but in much larger doses and failed to get any result at all. He questioned if the reason was the homeopathic size of the dosage.

Dr. Hasking detailed the case of a man of 53 years, who had been sick for three to four days with what seemed to be an attack of grippe. He had chiefly at night a cough that bothered him a great deal. This was followed by a severe headache and a high tension pulse. Then came a relative anuria, and this was succeeded by a sudden pulmonary hemorrhage that was very resistant to any treatment. The lungs were negative to percussion and the

sputum was also negative. Then after a few days the wife of this patient began to cough and to raise blood, and a few days after the only child followed the same course. The chest organs of both were also quite negative. Careful anamnesis now brought out the fact that all the patients complained of a peculiar taste in their mouths. The doctor now realized that he had noticed the same thing after his calls, but had ascribed this to a new brand of tobacco that he was using. To be brief, investigation revealed that the family was using a charcoal stove and a drum overhead to heat the sick room, and the removal of this caused the prompt recovery of all the patients. The condition therefore was one of poisoning by sulphurous acid and carbon monoxide.

Dr. W. Pyle commented on the fact that so many of his cases of scarlatina had been complicated with a severe nephritis lasting anywhere from three to ten weeks, and the albumin contents amounting to ten and twelve per cent. In one case of the longest duration he had used a streptococcus vaccine from a case of scarlatina furnished him by Dr. McLaughlin. The inoculation rapidly brought down the albumin content and the second did so too. But the third undid all the previous good, probably because it was given at the wrong stage of the opsonic index.

Dr. Strasser showed the specimen and detailed the case of a sarcoma of the male breast. The man was 44 years old, and had noticed the swelling over the right breast only two months before. It had only begun to be painful. It was cystic to the feel, about five inches in circumference, and attached at several places to the underlying structures. Skin was not involved. Complete Halsted operation done. At the very end of the operation the fruitlessness of the effort became apparent, for there was a nodule up under the right clavicle which had eroded the ribs so thoroughly that even after the curetting away of the tissue, there was danger lest the pleura be invaded. Recovery from the operation. Prognosis of course was very bad.

Dr. Rosenkrans reported the case of a child ten years old, with pulse 160 and respiration 60, who gave a number of meningeal symptoms, and later showed the chest dullness of pneumonia. The cyanosis of the skin was most marked, and the thought came to him if he could overcome this skin congestion and re-establish the normal equilibrium of the circulation that the child might more quickly return to its norm. He had seen the use of the Nauheim baths do so much good for the same condition in heart lesions that he had determined to try it on the next case. He did, and kept the child in the effervescent baths for periods varying in length, but there had been in each instance a very satisfactory response on the part of the circulation of the patient.

The paper of the evening was read by Dr. Strasser. Its subject was "Duct Papilloma of the Breast." (Paper enclosed.)

The discussion was led by Dr. George McLaughlin. He said that he had seen the removal of part of the breast so many times where the microscope had revealed that the whole breast should have been removed that he agreed that the more mutilating operation was often the safest in the end. He believed the

incision as Warren made it to allow of the inspection of the breast structures from the back of the gland, was a very valuable procedure. From the pathologist's standpoint the development of the breast had best be looked upon as Minot does. Its embryological formation was nearest that of the sudoriparous gland. Evidence was that the duct formation of the child was similar and that the acini were absent in the new born. He believed that he had been more fortunate than the writer of the paper in having seen much earlier stages of the condition under discussion than the specimens shown with the paper exhibited. In a series of thirteen cases of which he had records only one had shown malignant degeneration. Personally he had been able to find a periductal fibrosis in every one of his cases, and this explained to him the mode of origin of the cases. He thought that this fibrosis caused a pushing inward of the canalicular walls, and thus was started a papillary ingrowth that eventually became a duct papilloma. Only occasionally was such an ingrowth of the myxomatous type. It had in the past even been looked upon and called a sarcoma.

Dr. Hasking, in continuing the discussion, dwelt particularly on the question of the possibility of a malignant degeneration following in these cases, and defended the early and radical excision of such a breast with such possibilities.

Dr. Dickinson related the life history of the so-called benign tumors, and said that he had found that the clinical division of these tumors into adeno-fibromata, fibroadenomata and intracanalicular adenomata had been the most satisfactory. With all of them while he knew the possibilities of these tumors he felt that they might in intelligent patients be left to frequent inspection. But he had one case, where he had followed this plan, found that malignant disease had occurred.

Dr. Rosenkrans said that he had one case of the condition discussed. This was twelve years ago in a woman of forty-two years of age. There had been no discharge from the nipple, however. Not knowing the character of the growth before the operation, he had done a thorough removal of both the breast and the underlying muscles. Seven years after the patient died of cancer of the rectum.

Dr. Rector, of the Legislative Committee, made a report of the present work in the matter of the Osteopathic bills, and gave a description of the provision of the substitute bill that was under deliberation at the present time. Dr. Koppel, of the same committee, asked the members to wake up their representatives in the matter, and to show them by letters and telegrams that the medical men in the county are in earnest.

On motion the annual dinner committee was appointed.

New members elected were Drs. Emilie Rundlett, 310 Palisade avenue, Jersey City; F. Kirschenbaum, 3 Hampton Court terrace, Jersey City; Joseph Stack, 212 Garden street, Hoboken.

Officers for the year elected were: President, A. A. Strasser, Arlington; vice-president, H. J. Bogardus; secretary, A. P. Hasking; treasurer, H. H. Brinkerhoff (16th re-election); reporter, Joseph Koppel; censor, J. C. Parsons, all of Jersey City.



Permanent delegates: 1909, J. J. Baumann, J. J. Mooney, J. J. Broderick, H. H. Brinkerhoff, A. A. Strasser, W. P. Watson, H. Spence.

Annual delegates: T. R. Paganelli, H. Burnette, W. W. Brooke, B. S. Polla, W. L. Pyle, G. Culver, W. J. Arlitz.

Alternates: F. A. Finn, M. Swiney, G. D. Fyfe.

After adjournment refreshments were served and a social meeting took place.

With this report from Hudson, the reporter wishes to express his thanks to the editor of the Journal for the unfailing courtesy with which his reports were received and to the Publication Committee for the generous allotment of space for these reports. He prays that the same courtesies be extended to his successor.

MIDDLESEX COUNTY.

Howard C. Voorhees, M. D., Secretary.

The Middlesex County Medical Society held its annual meeting at Schussler's Cafe, New Brunswick, Wednesday, April 21st, 1909. In the absence of President F. E. Riva, on account of illness, Vice-President Albright presided.

The attendance was much larger than usual. The session convened at 4 o'clock P. M. The following officers were elected for the ensuing year: President, Dr. J. C. Albright, of South Amboy; vice-president, Dr. Benjamin Gutmann, of New Brunswick; secretary, Dr. Howard C. Voorhees, of New Brunswick; treasurer, Dr. David C. English, of New Brunswick; reporter, Dr. Arthur L. Smith, of New Brunswick.

Drs. W. E. Ramsay and John L. MacDowall, of Perth Amboy, and A. C. Hunt, of Metuchen, were elected as the annual delegates to the State Society, and Drs. John G. Wilson, of Perth Amboy, and A. Clark Hunt, of Metuchen, were nominated as permanent delegates.

Following the transaction of routine business, including the election of Drs. Elmer H. Eulner, of South Amboy, and Lansing Y. Lippincott, of Metuchen, as members of the society, reports were presented of several interesting and some unusual cases in the medical and surgical practice of members.

Dr. F. M. Donohue reported—somewhat in detail—the following cases: Caesarian section in a woman who had had three children previously, born dead, mother and child both now in excellent health; case of the removal of a very large uterine fibroid tumor; case of prostatectomy operation; case of umbilical hernia operated on by the Mayo method; also a case in which curettage, repair of cervix and perineum, resection of ovaries and Wylie's operation on round ligaments, were done on the same patient in about one hour's time.

Dr. A. L. Ellis, of Metuchen, reported an unusual case of anuria, with complications. Dr. A. Treganowan, of South Amboy, also reported some obstetrical cases. Discussion of the cases followed, Drs. Ramsay and Henry, of Perth Amboy; Donohue, Treganowan and others participating.

Dr. A. C. Hunt, of Metuchen, gave a report of the action of the Legislature at the recent session, on various bills in which the medical profession was specially interested, and spoke of

the good work done by the State Society's Committee on Legislation.

Dr. W. E. Ramsay spoke of efforts made in the prosecution of illegal and incompetent midwives and the great need of active work to suppress criminal practices.

Dr. D. C. English spoke of the good work done by the Committee on Legislation of the State Society, and of the great need of increased activity on the part of our county societies in sustaining that committee. He moved that a committee of three, with Dr. Ramsay as chairman, be appointed as a committee on legislation, who shall endeavor to awaken hearty cooperation on the part of our membership in efforts to secure wise and proper legislation and to defeat the passage of harmful bills affecting the health interests of our State. The motion was unanimously passed, after amending it so as to include, as a part of the work of the committee, the prosecution of illegal and ignorant practitioners of midwifery. The president appointed as the committee, Drs. W. E. Ramsay, of Perth Amboy; E. E. Haines, of South Amboy, and D. C. English, of New Brunswick.

The society then adjourned to the dining-room of the cafe, where an excellent annual dinner was served and greatly enjoyed.

SOMERSET COUNTY.

J. P. Hecht, M. D., Reporter.

The annual meeting of the Somerset County Medical Society was held at the Ten Eyck House, Somerville, N. J., April 8th, 1909. The annual election resulted as follows:

President, Dr. P. J. Zeglio; vice-president, Dr. C. R. P. Fisher; secretary, Dr. F. E. DuBois; treasurer, Dr. F. H. Flynn; reporter, Dr. J. P. Hecht; censor, Dr. H. V. Davis; annual delegate to Medical Society of New Jersey, Dr. E. R. Groff.

Dr. David F. Weeks, superintendent of the State Village for Epileptics, was elected to membership in the society, and spoke of some interesting phases of his special work.

Dr. John W. Ward, of Pennington, N. J., honorary member, and Dr. Wm. H. Murray, of Plainfield, N. J., were present as guests. The paper of the day on "The Pancreas as a Possible Field for Surgery," was read by Dr. Edward Milton Foote, of New York. After the routine work was completed, the annual dinner was served.

NEW MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION FROM NEW JERSEY.

Bannister, Robert L.....	Newark
Bidwell, Horace G.....	Jersey City
Britton, Charles P.....	Trenton
Dieffenbach, Richard H.....	Newark
Douglas, James.....	Morristown
Kirk, Grant E.....	Camden
Koppel, Joseph.....	Jersey City
Larkey, Charles J.....	Bayonne
Lippincott, Jesse D.....	Newark
MacMorrrough, Francis K.....	Jersey City
Mayer, Fred W.....	Jersey City
McCroskery, J. H.....	Weehawken
North, James.....	Atlantic City
Robinson, Manning N.....	Newark
Slack, Clarence M.....	New Brunswick
Suydam, John L.....	Jamesburg

# THE JOURNAL

OF THE

## Medical Society of New Jersey

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MAY, 1909

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*Each member of the State Society is entitled to receive a copy of the JOURNAL every month.*

*Any one failing to get the paper promptly will confer a favor upon the Publication Committee by notifying them of the fact.*

*All communications relating to the JOURNAL should be addressed to the Committee on Publication, 252 Main Street, Orange, N. J.*

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### OUR ANNUAL MEETING

#### A FULL ATTENDANCE NEEDED.

We make an early and urgent plea for a large attendance at the Annual Meeting of our State Society next month at Cape May.

There are very important business matters that will be presented to the House of Delegates and there OUGHT to be present a FULL DELEGATION from EVERY COUNTY SOCIETY. If any who have been appointed cannot attend, arrange for other members to be present to take their places.

Let every Permanent Delegate make a special effort to attend.

We know the place of meeting is far distant from the central and northern parts of the State where the majority of our members reside, but you are needed at Cape May this year and we sincerely hope that this large body of our members will be well represented even if it is inconvenient and will cost considerable personal sacrifice for some to attend.

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#### TO SECRETARIES AND TREASURERS OF COUNTY SOCIETIES.

The time for our next annual meeting is approaching. On or before the 18th day of May all county secretaries and treasurers must send in their reports to, or through, the secretary of the Medical Society of New Jersey.

The four lists required of the secretaries are fully specified in the by-laws (Chap. I., Sec. 2). The full name and address should be legibly written. Details for

permanent record—age, birthplace, college and year of graduation, etc.—should be obtained from all members who have not as yet supplied such data. The secretary of the M. S. N. J. will send blanks for this purpose to any county secretaries who may need them. It is especially desirable that all new members should fill out these blanks.

The non-affiliating list needs thorough revision. Deaths and removals should be properly noted. The names of all physicians who have recently come into the county and have not yet joined the county society should be added. The printed list of last year can be furnished by the secretary of the M. S. N. J. to any county secretary who wishes to take it as the basis for his report for this year.

The county treasurers should draw their checks to the order of Dr. A. Mercer, treasurer, and forward them, with the names of the members who have paid their dues, to the secretary of the M. S. N. J., who will compare the lists and forward the checks to Dr. Mercer. County societies whose secretaries or treasurers fail to make proper returns on or before May 18th, are regarded as delinquent and are liable to be suspended and to lose their representation in the M. S. N. J.

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#### PRELIMINARY PROGRAM.

We had expected to give a comparatively full preliminary programme in this issue of the Journal, but there are some items that are not yet definitely settled. We give the following list of authors of papers who have already promised, and their subjects as far as they have been definitely decided upon.—Editor.

1. Oration in Medicine, by Dr. Thomas N. Gray, of East Orange.
2. Oration in Surgery, by Dr. George E. Brewer, of New York City.
3. Prophylaxis of Insanity, by Dr. Henry A. Cotton, of Trenton.
4. Intramuscular Administration of Mercury, by Dr. Henry A. Pulsford, of South Orange.
5. Obstetrical subject, not yet announced, by Dr. Edward P. Davis, of Philadelphia, Pa.



6. Obstetrical subject, not announced, by Dr. Simon Marx, of New York City.
7. Infant Feeding, by Dr. David E. English, of Millburn.
8. Subject not announced, Dr. W. W. Beveridge, of Asbury Park.
9. Laryngological subject, not announced, Dr. F. F. C. Demarest, of Passaic.

Dr. E. J. Marsh, chairman of the Committee on Scientific Work, says: "I have others in process of negotiation, but not definite enough to be announced at present."

### OUTCOME OF LEGISLATION.

We call attention to a communication in another column from Dr. L. M. Halsey, chairman of our Committee on Legislation, and ask for it that careful consideration which it ought to receive. We believe that few members of our society are aware of the large amount of time Dr. Halsey has given to the work of this committee and of the difficult and trying character of that work. While he properly and justly gives credit to the large number of physicians from different sections of the State, who, by their frequent visits to Trenton, have sought to sustain the committee and have rendered most valuable assistance, we should not fail to recognize the faithfulness and zeal which Dr. Halsey and the members of his committee have displayed and to give them due commendation and hearty thanks.

The doctor gives us a very good preliminary report of the committee's work. We have not accomplished what we had hoped for, but the campaign has not been in vain, and the results have not been discouraging when we consider the conditions that confronted us—the attitude of the Governor toward the medical profession, the methods of our antagonists, the devious and uncertain ways and more uncertain fulfillment of promises of the partisan legislator. We have rather occasion "to thank God and take courage," and get our forces in better condition for another campaign.

Governors come and go and so do legislators, but the Medical Society of New Jersey is going to live on, and when she undertakes the fight for the Public Good, she may meet with temporary defeats, as she did for twelve years in fighting for a State Board of Health in the sixties and seventies, but she is going to win.

There is one condition, however, which is essential for certain and speedy success, which Dr. Halsey states when he says that the great need now is to secure a united society in an aggressive fighting condition. At our coming annual meeting we should unite on a plan of action and then have every member get ready for action, and the first skirmish should come in the early fall. The four thousand doctors in New Jersey have a mighty influence that will prove irresistible when put forth for the public good. It was demonstrated forty years ago. Let us then be united in purpose and in action. We are not living in Gideon's time, when the 32,000 could be cut down to 300, the ease-taking, fearful and over-conservative, "looking-out-for-number-one" members being sent home. Our little contingent did noble service this year and they ought to have received the support of every member—instead of the lukewarmness of many and the opposition of some to which Dr. Halsey's letter refers.

A few words concerning the legislative bills we were interested in. The State Department of Health bill, providing for a Commissioner of Health, who should be largely responsible for proper and efficient administration, is a bill in keeping with the progress of the times in sanitary science and its administration, which would tend to stop the retrograde movement in New Jersey which was originally the leading State in the adoption of public health measures. We had no idea of the passage of our bill this year; its introduction was only the beginning of an effort against political manipulation in health measures, which ignores the only men qualified to treat disease and disease conditions—the

control and prevention of disease. We had difficulty in finding a legislator willing to introduce this bill—it was a non-political measure and they were evidently afraid of the “big stick.” It was allowed to sleep in committee.

The Osteopathic bill for a separate board of examiners, etc., we succeeded in defeating, though a most desperate attempt was made to have it rushed through during the closing hours of the session. The substitute bill introduced in the Senate by our committee passed in the Senate under the leadership of Senator Frelinghuysen, who deserves warmest praise as an honest, fearless man and who recognizes the fact that the medical profession is working for the public good and not for the advancement of its own interests. This bill was defeated by a large majority in the Assembly in its closing hours, by the disgraceful tactics of our opponents.

The Optometry bill failed of passage, as it ought to for the public good. The Midwifery bill was passed, as it ought to have been, as it means the saving of the lives of many mothers and children and the lessening of criminal abortion and other evil practices. The Marriage License bill, while not strictly a medical measure, was passed, as it ought to have been, for the improvement of moral and social conditions, and, indirectly, of health and life protection. If there were any technical errors in these two last named bills, as has been intimated, they should have been pointed out before it was too late to correct them.

Other bills in which medical men were specially interested and to which our committee gave attention, are referred to in Dr. Halsey's communication.

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We are not, as Jerseymen, proud of the record made by our legislators at the session of the Legislature which has recently closed. As we have pointed out, some good bills were passed; some bad ones were defeated, or failed to pass, but the record as a whole is discreditable, especial-

ly in regard to measures affecting the health and lives, and also the morals, of our citizens. The closing scenes of the Assembly were disgraceful. We are sorry to know that the promises of the legislator are often utterly unreliable. We are informed that promises have often been made to our committee by members of the Legislature who professed to believe that our position was right, and who also promised our opponents to vote directly opposite. The most striking illustration of this was exhibited in the vote on the Senate Osteopathic bill in the Assembly in its closing hours. It is passing strange that our legislators as a rule—there are several honorable exceptions—persist in considering almost every bill presented from the partisan political viewpoint, often voting as the political boss directs them to vote. One of the most pitiable exhibitions of this is when a legislator openly calls his political boss and asks him how he should vote on a certain bill; or when he casts a vote and, hearing from his boss, almost immediately changes his vote to the other side.

Why are not our legislators intelligent enough and honest enough to vote on any and every bill according to their honest convictions as to its necessity, whether its provisions are right and proper—for the best interests of our citizens and the State? This is not only the RIGHT course, but IT IS THE BEST POLICY FROM THE POLITICAL PARTY VIEWPOINT. The number of independent voters is increasing rapidly, because intelligent voters are getting tired of the attempts of a few dictators not only to control the legislator, but to overthrow the expressed will of the people and thus make the elective franchise a farce; they want intelligent and independent legislators.

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How did it happen that the Trenton True American sent out to some, if not all, the newspapers of the State the following squib from their issue of April 15, 1909, headed “House Defeats Medical Trust Bill,” and of which one copy in our posses-



sion was in an envelope on which was printed the card of that newspaper, addressed to another newspaper in Essex County?

The "Medical Trust Bill" known as Frelinghuysen Bill, No. 231, met with overwhelming defeat in the House of Assembly last evening. The forces of the Osteopaths and also of the Christian Scientists were strongly arrayed against the bill, which was killed by a vote of 30 to 14.

The obvious weakness of the bill was that it failed to take into account the new drugless methods of treating diseases.

The bill, as originally presented, contained drastic provisions for the Osteopaths, which, if passed, would have legislated most of the practitioners of that school out of existence in this State.

The bill also contained a "joker" for the Christian Scientists and other religious sects. The Christian Scientists, however, succeeded in having an exemption clause inserted which would legalize their practice. The bill, as thus amended, had passed the Senate, but the House refused to grant their approval on the ground that the bill was unjust to the Osteopaths.

This item bears the earmarks of the osteopath and utterly misrepresents the medical profession. The bill—No. 231—which passed the Senate almost unanimously, was the fairest and best solution of the osteopathic situation for the osteopaths themselves, we believe, that could have been suggested, as originally drafted. There were amendments made to it which we did not like and we doubt if they ought to have been made. It showed conclusively to any unprejudiced mind, capable of understanding the need of securing such proper requirements for medical licensure as would protect the public, that the Medical Society of New Jersey sought only the public good. There was no advantage or benefit in the passage of that bill to the medical profession, and if the osteopaths were honest in their desire to protect the public against incompetent men in their own practice, they ought to have joined with us in securing its passage.

Why should they not have been satisfied with the same solution as that made in the case of the homeopathist and eclectic and which has given perfect satisfaction to the members engaged in those lines of practice? Why should special and extraordi-

nary privileges be given to a new cult of only about 150 members that have not been granted to the 4,000 men engaged in the practice of SCIENTIFIC medicine? We don't ask these privileges because WE DO NOT ASK PROTECTION FOR OURSELVES BUT FOR THE PUBLIC AGAINST INCOMPETENT MEN. In reference to the statement that the Senate bill would have "legislated most of the practitioners of that school out of existence in this State," we only say it ought to have done so if they were incompetent, rather than as they would have had it—to pass all, good, bad and indifferent, except those osteopathists who belong to the other faction among them. It is a question if that separate board of examiners has not for one of its main objects to shut out that other faction from practice in this State.

The one great satisfaction we have in considering the outcome of this campaign in behalf of the public, is that our Committee on Legislation made an open, straightforward fight. It did not seek to use the druggists or Christian Scientists to secure an advantage and make up for a paucity in numbers for effect on the legislators, and it did not wait till the closing hours of the legislative session when almost superhuman efforts are made and falsehood and deceit are used to rush through objectionable bills.

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### GRACEFUL RECOGNITION.

We find in a recent issue of the Medical Standard an item to which we give not only prominent place in our Journal, but which we most heartily endorse, not as presenting to the profession, however, an occasion for the display of mere "Justice," but as an occasion for the recognition of most devoted service and for the expression of appreciation and grateful remembrance of a man worthy of our esteem for what he was and what he did, especially as we recall the kindly, courteous and helpful manner which characterized the doing, as secretary of the American Medi-

cal Association for many years. The item is as follows:

"Justice.—W. B. Atkinson! This venerable man was for many years the honored, respected and loved secretary of the A. M. A. Many a doctor who reads these words will remember his kindly ways, his unflinching courtesy—a man who never could find it in his heart to refuse a favor to anybody. Dr. Atkinson is now living in comparative poverty, in advanced age. It would be a kindly act to pension the deserving old secretary for his few remaining years. The treasury of the A. M. A. is full to overflowing with the voluntary contributions of thousands of physicians. We could well afford to grant him one hundred dollars a month, in recognition of the services he rendered us during the many lean years, when his personal influence meant much to the struggling association. Were such a proposition to be made in the general meeting of the association it would show how its justice was appreciated. Shall it not be made?"

We recall the names of a few men prominent in the A. M. A. in the earlier part of our thirty-two years of membership in the A. M. A. whom it was our great privilege and pleasure to know as warm friends, and among them was Dr. William B. Atkinson. We esteemed him highly not only as a personal friend, but also because he was one of the most courteous and obliging men in official position we ever met and one of the most devoted servants an organization ever had.

He was ever a welcome visitor at the annual meetings of our State Society; his unassuming and genial manner, his devotion to his aged mother whom he loved to have accompany him when he attended medical society meetings, as well as the secretarial position he so worthily filled, always secured him a warm reception.

We believe that the A. M. A., at the coming annual meeting, can do nothing that will reflect more credit upon the association and receive more general approval by the profession than to make some such practical expression of its regard for a former devoted officer, as has been suggested by the Medical Standard.

There have been held several meetings of County Societies which have not been reported to the editor. Please let us have them for the June issue of the Journal.

#### ANNUAL MEETINGS.

**The American Medical Association—Atlantic City, N. J., June 8-11.**

**The Medical Society of New Jersey—143d Annual Meeting, Hotel Cape May, Cape May, June 23-25.**

American Therapeutic Society—New Haven, Conn., May 6-8.

Association of American Physicians—Washington, D. C., May 11 and 12.

Medical Library Association—Washington, D. C., May 12 and 13.

National Association for the Study and Prevention of Tuberculosis—Washington, D. C., May 13-15.

American Neurological Association—New York City, May 27-29.

American Pediatric Society—Lenox, Mass., May 27 and 28.

American Association Genito-urinary Surgeons—Pocono, Pa., May 31 and June 1.

American Gastro-enterological Association—Atlantic City, June 7 and 8.

American Protological Society—Atlantic City, June 7 and 8.

Twelfth International Congress on Alcoholism—London, England, June 18-24, 1909.

International Medical Congress—At Budapest, August 29 to September 4, 1909.

The following announcements have been received:

Medical Library Association—The twelfth annual meeting of the Medical Library Association will be held in Washington and Baltimore during the week of the meeting of the Association of American Physicians. The first session will be held at the library of the Surgeon-General's office, on the afternoon of May 12, and on May 13 the members will go to Baltimore for the dedication of the new library building of the Medical and Chirurgical Faculty of Maryland, when Dr. William Osler, of Oxford University, will deliver the oration. Professor George Dock, of Tulane University, is the president of the association.

National Association of the Study and Prevention of Tuberculosis—The fifth annual meeting will be held at the New Willard Hotel, Washington, on May 13 to 15, 1909. The congress will open with a general meeting on Thursday, May 13, when the vice-president, Mr. Homer Folks, of New York, will speak. Following this there will be meetings of the various sections. Among the other speakers will be Dr. Victor C. Vaughan, of Ann Arbor, whose subject will be "Tuberculosis Legislation. State and Municipal;" Dr. William H. Welch, of Baltimore, "The Selection of a Library for the Study of Tuberculosis;" Dr. G. B. Webb, "Some Hematological Studies in Tuberculosis;" Dr. John W. Brannan, of New York, "Treatment of Surgical Tuberculosis." There will be also a discussion on various methods of increasing the efficiency of the sanatorium, the subject being taken up by a number of speakers from different points of view.

American Gastro-enterological Association—The twelfth annual meeting of this association will be held at the Hotel Windsor, Atlantic City, N. J., on June 7 and 8, 1909. The preliminary programme contains the following papers,



among others: "Development of Gastro-enterology in America," by Dr. J. Friedenwald, of Baltimore; "Duodenal Ulcers," by Dr. Max Einhorn, of New York; "Disturbances of the Chemic Co-ordinations of the Organism," by Dr. J. C. Hemmeter, of Baltimore; "Pathogenesis of Gastric Tetany," by Dr. W. G. MacCallum, of Baltimore. There will also be a symposium on the subject of gastro-enterostomy.

Twelfth International Congress on Alcoholism—This congress will meet in London, England, June 18 to 24, 1909. This will be the second great international congress under government auspices to discuss the alcoholic problem, the congress two years ago having met under the auspices of the Swedish Government. The Duke of Connaught will preside at the coming meetings as honorary president, and invitations have been sent to all the governments of Europe and America to send formally delegates. In response to this invitation the United States has appointed Dr. Thomas D. Crothers, of Hartford, Conn., as its delegate, and he has been made an honorary vice-president. Further information may be obtained from him.

#### American Proctologic Society.

The eleventh annual meeting of this society will be held in Haddon Hall, Atlantic City, June 7 and 8, 1909. President, George B. Evans, M. D., Dayton, Ohio; secretary, Lewis H. Adler, M. D., Philadelphia, Pa. The preliminary program has recently been issued and gives, besides the president's address on "Progress in Proctology," twenty-six papers on the following subjects:

"A Review of Proctologic Literature for 1908," Dr. S. T. Earle, Baltimore; "An Operation for Anal Pruritus," Dr. T. C. Martin, Washington; "The Treatment of Pruritus Ani," Dr. W. M. Beach, Pittsburg; "Appendicostomy as an Aid in the Treatment of Malignant and Intractable Dysentery," Dr. J. L. Jelks, Memphis; "Prophylaxis and Treatment of Cicatricial Rectal Stricture," Dr. A. B. Graham, Indianapolis; "Use of Spinal Anesthesia in Rectal Surgery," Dr. C. F. Martin, Philadelphia; "Vaginal Anus in the Adult; Report of Cases," Dr. L. J. Hirschman, Detroit; "Tubercular Fistula with Extensive Infiltration, with Specimen," Dr. S. T. Earle; "Abdominal Massage as a Means of Relief in Chronic Constipation," Dr. T. L. Hazard, Pittsburg; "Intestinal Auto-intoxication; Its Treatment by Irrigation," Dr. W. L. Dickinson, Saginaw; "Peritoneal Adhesions, with Specimen," Dr. J. A. MacMillan, Detroit; "Diseases of Colon and Rectum as Caused and Influenced by Pathologic Conditions of Other Abdominal and Pelvic Organs, with Cases," Dr. A. B. Cooke, Nashville; "Necessity for Routine Examination of Rectum in Intestinal Diseases," Dr. D. H. Murray, Syracuse; "Ball's Method of Operating on Internal Hemorrhoids," Dr. G. W. Combs, Indianapolis; "Ball's Operation for Pruritus Ani, with Report of Case in Which Necrosis of the Flap Occurred," Dr. L. J. Crouse, Cincinnati; "Test Diet—Value in Intestinal Disturbances," Dr. J. M. Lynch, New York; "Primary Gonorrhea of Rectum in Male," Dr. A. J. Zobel, San Francisco; "Bismuth Paste in Treatment of Rectal Fistula," Dr. J. R. Pennington, Chicago; "Venereal Diseases of Anus and Rectum," Dr. J. P. Tuttle, New York City;

"Some Unusual Conditions Met with After a Number of Years Spent in the Domain of Proctology," Dr. J. M. Matthews, Louisville; "Pruritus Ani: Its Etiology and Treatment," Dr. T. C. Hill, Boston; "Foreign Bodies in the Rectum and Sigmoid Flexure," Dr. E. A. Hamilton, Columbus; "Treatment of Constipation," Dr. S. G. Gant, New York; "A Consideration of Some of the Benign Growths of the Rectum," Dr. G. J. Cook, Indianapolis; "Malformations of the Anus and Rectum," Dr. J. C. Brick, Philadelphia; "Naevus of Anal Region, Case Associated with Internal Hemorrhoids," Dr. L. H. Adler, Jr., Philadelphia.

The program says: "The profession is cordially invited to attend all meetings."

## Correspondence.

### Committee on Legislation.

Dr. David C. English, Editor, Journal Medical Society of New Jersey:

The session of the Legislature is over and the committee desires to make a preliminary report to the members through the Journal, and some few suggestions which we trust will be of benefit to us in the near future.

What we were able to accomplish during the last session of the Legislature amounts to very little, but I am very sure that if it had not been for the faithful physicians who gave a great deal of their time and were present week after week during the latter part of the session, there would have been bills passed which would be detrimental to the medical profession of this State, and an opening would have been made which would have ultimately resulted in lowering the high standard in our State.

Your committee for a number of years has tried to impress upon the profession in the State the fact that if it was thoroughly organized and unity of action secured, we could unquestionably pass many good measures for the safe-guarding of the public health and the protection of the inhabitants of this State against quacks and imposters.

Through the columns of the Journal and by letters and circulars sent broadcast over the State to practically all the members of the State Society, we have tried to keep you posted at all times as to what was being done and of the necessity for your help and assistance at those times. It has been astonishing to the committee to see how little notice some of the societies have taken of our communications. Members of the Legislature in sufficient number to have passed our medical bill without any question have told me that they have never been spoken to by any of their physicians from the counties they represent in reference to this bill, and they never have received any communications asking their support of this and other measures advocated by your committee. At least ten members of the House of Assembly have told me that physicians of their counties have asked them not to vote for any bill as the Medical Society of New Jersey did not want legislation of any character at this time.

We have repeatedly asked the support of almost every member of the State Society for Senate bill 231, and if there had been the thorough organization and the hearty co-operation we felt that we should have received, the

bill would have passed the Legislature by a large majority. The committee think that we had a most excellent bill, and it was definitely decided at the last meeting held before its introduction into the Senate that we would all work untiringly for its passage, and then to find that many physicians in the State had urged the members of the Legislature to vote against it or to be opposed to any legislation, to say the least, is discouraging. Too much praise cannot be given to Senator Frelinghuysen for his untiring work during the whole session for the interest of the medical men of this State, notwithstanding that very great pressure was brought to bear upon him, and he was flooded with letters and telegrams, he was faithful and accomplished just what he promised us he would do. Mr. Smalley, of Somerset County, was a true and firm friend to the medical men of the State; both in committee and on the floor of the Assembly he supported all measures in which we were interested, and in the final vote on 231, he made a strong plea for its passage.

The Midwifery bill, which passed both houses, will probably not receive the approval of the Governor owing to some slight technicality which we do not think exists.

We assisted in the passage of numerous bills advocated by the State Board of Health for the Prevention of the Pollution of Streams; amendments to the Pure Food Law; the Inspection of Dairies and Dr. Coit's Certified Milk Bill, and an appropriation of \$1,500.00 for the Tuberculosis Association of the State.

The Oestopaths were thoroughly organized, and in several instances various papers throughout the State were subsidized. The members of the Legislature were flooded with letters and telegrams and circulars, and if it had not been for very hard work during the closing hours of the session one of their bills would have passed the Legislature beyond a question.

At the annual meeting of the State Society, the committee proposes to have a legislative conference at which time we want the county secretaries and the members of the Legislative Committee to be present, and we then hope to develop some plan by which we may become thoroughly organized, and our entire program mapped out for the coming session.

Several county societies have not forwarded the names of their Legislative Committee to the chairman of this committee. This should be done at once.

We are satisfied that unless the medical men of this State are willing to do earnest and sincere work before the next session of the Legislature we will undoubtedly see upon the statute books of the State of New Jersey,\* after the next session, measures which we will all be convinced lowers the standard of medicine in this State.

L. M. HALSEY.

Williamstown, N. J., April 20, 1909.

### Smallpox in New Jersey.

D. C. English, M. D.,

New Brunswick, N. J.

Dear Doctor: Following is a statement in regard to the cases of smallpox which have recently occurred in this State:

A report was received from Camden, N. J.,

during the week ending February 27 that a case of smallpox had been discovered. During the week ending March 6, a case was reported in Woodbridge Township, and two additional cases in Camden. In the week ending March 13 a case was reported in New Brunswick, and ten cases were discovered in Perth Amboy. Following these cases of the disease were found in Paterson, Lodi and other localities in the State. The complete record up to the present time of the number of cases occurring in various localities is as follows:

Perth Amboy, 31; Woodbridge Township, 1; Plainfield, 6; New Brunswick, 7; Keyport, 1; Haddonfield, 1; Paterson, 8; Lodi, 1; Camden, 11; Hackensack, 1, and Hightstown 1, making a total of 69 cases. The disease has been of mild character, and the making of diagnosis on this account was difficult. In some localities it was necessary to send for expert diagnosticians to confirm the suspicions of local physicians. In Perth Amboy, where the largest number of cases occurred, all but two of the patients have been discharged and the hospital is closed. We have every reason to believe that there will be no extensive outbreak of the disease in New Jersey.

Very respectfully,

A. CLARK HUNT,

Chief of Division of Medical and Sanitary Inspection.

Trenton, N. J., April 23, 1909.

(We thank Dr. Hunt for his prompt response to our request for information.—Editor.)

### HOSPITALS.

#### New Jersey State Hospital, Morris Plains, N. J.

The thirty-third annual report of this institution has been recently issued for the year ending October 31, 1908. Its medical department officers were as follows: Medical director, Britton D. Evans, M. D.; assistant physicians Drs. P. S. Mallon, H. A. Cossitt, F. C. Horsford, A. J. Carroll, E. M. Fisher and L. K. Henschel. Dr. L. L. Mial is visiting and consulting physician on diseases of the eye, ear, nose and throat. Dr. H. A. Cossitt resigned in August, 1908, and Dr. Blase Cole, of Hainesville, N. J., was elected sixth assistant physician in September, 1908, after a competitive examination.

We give the following items from the reports of the managers and the medical director:

In the report of the Board of Managers, the overcrowding of the hospital is referred to, and for the relief of that condition it is suggested that the institution be relieved of the convict and criminal insane, who are a demoralizing element in the hospital and an imposition upon those patients who are unfortunate, but not guilty of crime. An addition to the dairy barn, an increased water supply, a new store-house and a cold storage plant are mentioned as some of the hospital's needs.

The condition of the County Hospitals for the Insane is referred to: Passaic with 9 male and 30 female patients of the incurable, demented class, are well cared for. Essex County, in the Newark building, were 283 male and 506 female patients; in the Cedar Grove buildings, 271 male and 227 female patients, and the man-



agement is commended. Hudson County hospital is seriously overcrowded, 375 female and 270 male patients, about 400 being its normal capacity. An entirely new hospital, constructed upon scientific principles and modern in character, is spoken of as greatly needed.

From the report of Dr. B. D. Evans, the medical director, we give the following points:

From August 17, 1876, to October 31, 1908, 8,953 persons were admitted for care and treatment, 2,173 were discharged, recovered, or more than 24 per cent. of all under treatment were restored to mental health. At the beginning of the last hospital year there were in the institution 1,943 patients—993 men and 950 women; admitted during the year, 495—271 men, 224 women—the largest number ever admitted in one year. Of the 1,943 above mentioned, 1,654 were indigent, 179 were private or pay patients, 71 were convicts and 39 criminals. The 495 admissions were 241 county indigent, 160 State indigent and 94 were pay patients; 182, or nearly 37 per cent., were of foreign birth; 26.22 per cent. of patients admitted the past year recovered. A history of hereditary taint was obtained in 22 per cent. of those admitted; 21 per cent. had some form of mental depression—melancholia; 28 per cent., mental exaltation or mania in some form, and 24 per cent. the mental deterioration known as dementia, including parietic dementia. The insanity in 81 cases was complicated by disease of the circulatory system, arteriosclerosis being a prominent symptom in 49.

During the year 157 patients died; the preceding year being 177 deaths, with 123 less population. The death rate of total number was 6.77, as contrasted with 8.06 per cent. for the previous year. Twenty-one per cent. of the number who died suffered from senile dementia, and an equal percentage from parietic dementia.

The need of some changes in the laws governing commitments and judicial action as commitments is referred to. In reference to convicts and criminals the director says: "There were at the close of this hospital year 71 convicts and 39 insane criminals on the wards of the hospital. No citizen of the State wants his sick relatives or friends subjected to the association and influence of convicts and criminals. Other States provide for the segregation of this class, and it would be a credit to New Jersey to follow their good example."

A separate building located in the central part of the State is recommended for this class. Isolation of tubercular cases is also advised, and isolated cottages or tents for that class is suggested. There are sections of the report on treatment, laboratory work, overcrowding of the hospital (enlargement is not advised, but construction of a hospital for the insane in the southern part of the State is suggested), cottage for male nurses needed, improvements, increase of medical staff, etc.

The report closes with several statistical tables setting forth admissions, discharges and deaths, number of attacks, ages, occupations, nativity, forms of mental disease, alleged causes of insanity, complications, heredity, causes of death, etc. Of those admitted last year (495), 111 were from Essex County, 91 from Passaic, 82 from Bergen, 66 from Union, 62 from Hudson, 42 from Morris.

### John Wells Memorial Hospital, New Brunswick.

The annual meeting was held at the hospital building, March 23, 1909. The following items are taken from the report in the New Brunswick Times:

The following officers were elected:

John N. Carpender, president; V. M. W. Suydam, vice-president; Robert W. Prentiss, secretary; Wm. H. Benedict, treasurer.

The Medical Staff—The following members of the medical staff were reappointed: Drs. C. V. Buttler, H. G. Cooke, F. M. Donohue, Benjamin Gutmann, F. E. Riva, Lawrence Runyon, James P. Schureman, A. L. Smith.

Dr. D. C. English expressed a desire to be relieved from active duty and submitted his resignation as a member of the medical staff. The directors accepted with regret the resignation of Dr. English and in recognition of his long and faithful services to the hospital requested him to accept the honorary position of consulting physician on the medical staff to which they appointed him. Dr. Howard C. Voorhees was elected a member of the medical staff.

Secretary's report.—The following statistics cover the hospital year extending from March 20, 1908, to March 20, 1909.

They show that the work of the hospital is on the increase and that unless its funds are increased in proportion, its work will be seriously hampered.

The whole number of patients admitted and cared for during the year was 273. Of these 256 or 94 per cent. were from Middlesex county and 17 from elsewhere.

Treated free, 186; paid wholly or in part, 87. Males, 152; females, 121. Medical cases, 139; surgical, 134.

Discharged: Cured, 198; improved, 27; unimproved, 7; died, 24. In hospital, March 20, 1909, 17. Of the patients who died, 16 were hopeless cases when admitted, and died within several days afterwards. Free patients from the county 172, with 3236 total days' stay; pay patients from the county 84, with 1574 total days' stay. Free from elsewhere 14, with 135 total days' stay; pay from elsewhere 3, with 17 total days' stay. Totals, 273 patients, 4962 total days' stay. The average number of days in a patient's stay was therefore 18; and the average number of patients in the hospital per day was 13.6 for the year. In addition to these cases, 99 visits have been made to the hospital by out door patients who have had wounds dressed, etc.

The actual expenditures for maintenance and treatment of patients, including repairs, furniture, etc., were by the treasurer's report, \$9,108.98.

The average cost per patient per day was therefore \$1.83 1-2.

When it is considered that this includes medical attendance, nursing, maintenance, furnishing, etc., it will be seen that the affairs of the hospital are conducted economically. The increasing use of the institution by the community shows that the work is done satisfactorily. Reckoning on the basis of 1.83 1-2 per day, the total cost of county patients was \$8,829.96. Deducting from this \$1,721.65, the amount paid by the county pay patients, the net actual cost of the county patients to the hospital is \$7,108.31. The annual donation from the county made by the free-

holders is \$4,000. The hospital is thus obliged to secure elsewhere \$3,108.81 on account of county patients treated free.

The number of patients cared for this year is substantially the same as last year, but many cases have been unusually serious and long, so that the work done has been appreciably increased (about 16 per cent. more than last year.) Extra nurses have been required and the expenses generally have been increased proportionally. While the churches and individuals have increased their contributions, and the payments from patients are larger than ever before, the actual expense for the last two years have exceeded the income by a considerable amount. Every consideration of public policy, fairness and justice indicates that the former annual donation of \$5,000 from the county freeholders should be restored.

The directors record with sorrow and a sense of loss the death of Dr. S. V. D. Clark, a member of the medical staff. In this capacity he served faithfully and gratuitously from the foundation of the hospital, a period of twenty-five years. \* \* \*

The great work of the hospital has been done by the medical staff, whose services have been generously given without compensation. The directors desire to place on record their appreciation of this most essential and important service faithfully rendered year after year.

The work of the medical staff has been seconded most efficiently by the matron, Miss Jacobs and the nurses, Misses Trigge, Peterson, Wilson, who have carried out the plans of the directors in a satisfactory manner.

This hospital is to be congratulated on the completion of twenty-five years of most excellent work. Until the opening of St. Peter's Hospital about one year ago, it was the only hospital in the city.

### **St. Peter's General Hospital, New Brunswick, N. J.**

The Board of Directors of this hospital has just issued the first annual report. It is well printed, and shows a remarkably good year of work for this new institution. Bishop McFaul is ex officio president, and Rt. Rev. John A. O'Grady, managing director. The staff is composed of Drs. F. M. Donohue, P. A. Shannon, C. V. Buttler, W. J. Condon, J. W. Rice, F. E. Riva, B. M. Howley and H. C. Voorhees. The following items are taken from the director's report:

The work accomplished in the last year is most gratifying in its results, and justifies the establishment of the hospital, which comes in time to meet the wants of our rapidly increasing population. St. Peter's, which presented and dedicated to hospital purposes the building and premises where this beneficent work is going on, is amply repaid for its generosity by the blessings and benefits which may come to the community. An appropriation of \$2,500 was received from the Board of Freeholders of Middlesex County. The directors realize and highly appreciate the efficient services of the medical and surgical staff. The splendid record of one year's work reflects credit on their skill and devotion. The hospital work has increased so rapidly that the present building is hardly capable of accommodating the demand that is made upon it, so

that it may be necessary in the not distant future to enlarge the institution.

The Hospital has opened a Training School for Nurses. A regular course of lectures is given by the surgeons and physicians.

The following statistics are taken from the report:

Number of patients admitted—194 males, 192 females; total, 386. Discharged—Cured, 337; improved, 9; unimproved, 3; died, 18.

Average days' stay of patients, 19 days per patient; collective days' of patients in hospital, 7,457; average cost per day per patient, \$1.40; number pay patients, 186; free patients, 200.

Two hundred and sixteen operations are reported, of which there were: Appendectomy, 45; curettage, 25; herniotomy, 17; Alexander operation, 8; cholelithotomy, 7; cholecystectomy, 5; nephropexy, 6; perineorrhaphy, 6; cyst of ovary, 5; hemorrhoids, 9, etc.

The report closes with a detailed analysis of the diseases treated.

### **Morristown Plans a Phthisis Hospital.**

At a meeting held in Morristown, April 20th, a committee composed of Alderman Lewis S. Sturgis, Dr. Clifford Mills, Charles C. Oliver, George E. Reeves and B. W. Clifford, was appointed to secure site and plans for the building of a tuberculosis hospital. It is thought a building will be erected either on the Memorial Hospital grounds or the All Souls' Hospital property.

A dispensary is to be established in the basement of the new wing of the Memorial Hospital for the use of the Tuberculosis Society. This was reported at a meeting of the society in the hospital last night. The room, it was said, would be fully equipped for the work and thrown open for inspection to the public as soon as possible. A committee, consisting of Dr. G. A. Becker, chairman; Dr. Uebelacker and Rev. Ralph B. Urmy, was appointed to arrange for the opening.

As it would be late in the season when the society could obtain the material for a public exhibition of the work done in stamping out the disease such as shown in other cities, the local association decided not to attempt that part of the crusade. A campaign of education in fighting consumption will be started and plans are now underway for this part of the work.

### **Fair for Morristown Hospital.**

An event in society which is always attractive to both the older and younger sets and which presages success, is the annual fair of the Young Women's Guild of Memorial Hospital. This year it is to be held Tuesday, May 4, in Washington Hall. Heretofore the fair has been given on a Wednesday, but this year the day was changed to accommodate a professional troupe from New York, which will entertain in the afternoon.

By means of the fair the guild hopes to secure at least \$3,500 to create a fund for defraying the expenses of altering the new wing for the tuberculosis clinic, and also to add to the fund for the general expenses of the hospital. The fair will start at 9:30 o'clock and continue in the evening.



## Editorials from Other Journals.

### A REDUCTIO AD ABSURDUM OF ETHICS.

(From the *A. M. A. Journal*.)

There is a proverb to the effect that "one can not have too much of a good thing." But we must not forget that in this life at any rate the absolute good is never attainable and that that which was good at a given time and under given conditions may cease to be good at another time and under other conditions. We are moved to these remarks by a discussion on the "Ethics of Medical Consultation," by the Central Ethical Committee of the British Medical Association (*British Medical Journal*, August 1, 1908), where the following amendment was proposed to the rule regarding the non-supplanting of the attending physician by another physician called in consultation.

"A practitioner who has seen a case in consultation should not supersede the attending practitioner or attend the case in any future illness without the permission of the introducer."

This drastic amendment appears to have been brought forward at the instance of a divisional ethical committee (a division corresponds organically to a state association in the American Medical Association), which held that "if a patient would not continue with the original practitioner he might call in any other except one who has been introduced as a consultant." This bubble of sapientcy was pricked by the suggestion that a man, who had been practicing unopposed in a country village, suddenly confronted with a younger and more vigorous man, would only need, in order to protect his own practice, to call the other physician into consultation all round as quickly as possible. Needless to say the amendment was not carried.

The whole argument hinges on a misconception. The proposer of the amendment stated: "It was said that this was an attempt to interfere with the rights of the patient, but the rights of the practitioner must be asserted." The practitioner, however, has no rights at all, so far as regards the patient's freedom of choice beyond the right that every gentleman has to be treated as a gentleman—i. e., with ordinary courtesy. He has rights, however, against his brother practitioner, the consultant, which can be enforced in a disciplinary manner through ethical committees, if the consultant can be shown to have used any measures tending to cause the patient to waver in his allegiance to his regular attendant. It is true that it is often difficult to prove such treachery, and also that those who are capable of committing it are the very ones least likely to stand in awe of any disciplinary enactments; but that is hardly an adequate reason for penalizing patients generally, to add persuasiveness to the decrees of an ethical committee in occasional instances. The worst injury that can be inflicted on any good cause is to render it ridiculous.

### MEDICINE LOSES AND GAINS.

(From the *Medical Record*, Nov. 28, 1908.)

Under the above caption the *Nation*, in its issue of October 1, attempts to give a comparative estimate of the present and past status of medical science as seen from the layman's viewpoint. It thinks that the general impression is

coming more and more into prominence that various schools of mind cure are carrying on a winning fight against orthodox medicine. This impression is founded on the growing number of spiritual healers, on the prominence given to them by the press, on the well-known persons they convert, and on the fact that so-called religious clinics are springing up in connection with church activities. Professor Osler is cited as maintaining that practically our entire pharmacopeia might be discarded without appreciable loss to the general public health, but, fortunately, Osler is no longer accepted as an authority in therapeutics. To be sure, there are only a few diseases for which we possess specific remedies, but so long as these diseases are not preventable, or, rather, not prevented, we cannot do without mercury in syphilis, quinine in malaria, or the salicylates in rheumatism. Symptoms may be improved by diet, exercise, massage, rest and mind therapy, but none of these is germicidal, and so long as the germ is active just so long will the infected patient be menaced by latent manifestations of his malady. The assertion is made that "the human mind has always felt the anomaly of giving the mastery over life and death into the hands of men who are no better than ourselves," which strikes one as bad psychology and worse judgment. To feel an anomaly, mentally speaking, is, to say the least, an uncanny thing, and its spectral existence is disproved by the eagerness with which the aid of a physician is sought when a human being is in great pain. Even the Christian Scientist is forced to submit to the fell stroke of Tyrant Pain. There is no compromise save by the knife or hypodermic needle.

But even admitting that rational medicine is losing a few of its educated devotees, it is gaining converts among the immigrant millions. To quote again: "The Jews of the East Side have called in the doctors, whom in poverty-stricken Russia they could not afford to consult. \* \* \* In view of such successful effort as medical science is making against tuberculosis and other diseases, it would be absurd to maintain that medicine is being discredited as a science or art." Just so soon as people can be made to understand that physicians are not merely dispensers of pills and potions, but are experts in the management of disease prevention, just so soon will disease be lessened and the sum total of human misery dependent thereon approach the vanishing point. It is not alone knowledge, but wisdom—wisdom on the part of both physician and patient—which shall triumph in the end over disease.

### MEDICAL EXPERT TESTIMONY.

(From the *Pennsylvania Medical Journal*.)

When the Medical Jurisprudence Society of Philadelphia has no other subject before it for consideration, a paper upon expert testimony is presented. This always brings out a large attendance and an interesting discussion. Upon one point all will agree; namely, that medical expert testimony has fallen into disrepute and that some method must be suggested and carried out which will permit its proper employment in our criminal and civil trials.

Abroad, medical experts are largely appointed by the judges and it is considered a high honor

to serve in this capacity, though even there we hear of purchased, and thereby colored, testimony. That this method of selecting experts by the court, in some form or other, will probably be put into force here in America is shown by the action of the Massachusetts Medical Society in endeavoring to procure legislation, whereby the chief justice of the Supreme Court of that State is to be furnished with a panel of fifty medical men of high professional standing, with the designation of a specialty in which each is deemed an authority, from whom may be selected expert witnesses, and by the appointment of a special committee of the New York Bar Association, of which Mr. A. T. Clearwater is chairman, to report upon some mode of procedure for bettering the method of giving expert testimony, at the next meeting of the association. If each side would choose, with or, preferably, without consultation one with the other, from such a list a limited number of experts, and if the selected experts were kept in ignorance as to whether the defense or the prosecution had bespoken their services, biased expert testimony would be largely prevented. Then, too, if the number of experts were limited to two, it would undoubtedly happen in certain instances that the same expert would be chosen by each side.

Another reform which is demanded is a revision of the method of putting the hypothetical question. This could be accomplished by having one or more hypothetical questions framed by the judge under the suggestions of the attorneys for the prosecution and defense, and then presented for the consideration of the medical experts chosen as above, such discussion to take place away from the turmoil of the court and in a situation accessible to books and even to laboratory experiments. Irrelevant matter excluded or inserted into such a hypothetical question by the judge should be the subject of review by a higher court, just as in the case at the present time in regard to matters of law or of the judge's charge to the jury. The report of such medical experts in language sufficiently clear and untechnical as to be readily understood by the jury, should be read in court and an opportunity then be given for proper cross-examination of the material contained therein. Dissenting opinion as expressed in a minority report would, of course, be permitted.

It has been well said that the political boss is no better nor worse than those who make up the community in which he resides. The same may be said of the expert. Better our political conditions, and without any change in our methods of court procedure it will be found that a distinct improvement will be immediately shown in the character of the expert testimony delivered in our courts and so freely reported in the daily press. H. W. C'

#### DEATH BY ELECTROCUTION.

(From the *A. M. A. Journal*, January 9, 1909.)

The question of the efficiency of the execution of criminals by electric current is again agitated in the East. The old claims are being made that the electric current does not destroy life, but that the real execution in these cases is death by postmortem examination, by burial or by some other extraordinary extraneous occurrence. For this reason it has been seriously

proposed, according to the newspapers, to attempt to revive electrocuted criminals. One can hardly object to such a test on the ground of humanity, but the fact that electrocution is successful no serious-minded person who has looked into the subject can doubt. The few instances reported of individuals who have recovered after accidental exposure to electric currents of very high voltage are hardly pertinent to the case, and it is known that such accidents are usually fatal in spite of the differences of individual resistance and other conditions that might make the current less certainly deadly. These are properly guarded against in a legally conducted execution and the chances of survival are as remote as they would be after hanging, if, indeed, not more so. Many cases have been reported in which hanging proved ineffective, but how this could happen under modern conditions with physicians to test the efficiency of the method at the time, as is provided for in properly conducted legal executions, is not readily imaginable and still less so in the case of a properly conducted electrocution. Humanitarians who are so desirous to have the criminals, of all men, the ones to die painlessly, have little call to criticise the use of the electric chair.

#### SUICIDAL MANIA INCREASE—MEANS TO PREVENT.

(Editorial in *Kansas Medical Journal*.)

The suicidal mania has reached alarming proportions in the past few months. It has been steadily growing worse until lately it is impossible to scan a metropolitan newspaper without finding a report of one or more suicides. What can be the cause? One thing is certain, we are living a faster life than nature intended. Too much excitement, trouble and worry followed by a nervous breakdown. Life is taken too seriously and when reversals are suffered the will power is lacking to overcome them. The newspapers are also greatly at fault in publishing lurid accounts of the suicides. It sets one who is on the border line of suicidal mania to thinking that here is a simple way to rid himself of his trouble and the deed quickly follows the thought. It is also far too easy to obtain the means for self-destruction. The druggists as a rule do not give the matter a thought and consequently carbolic acid, morphia, strychnia and other poisons can be purchased as easily as sugar, salt or other commodities. The marriage of first cousins and mental defectives such as epileptics, which is prohibited by law in nearly all States, is another cause. What is the remedy? First, have the newspapers (if it is possible to do so) exclude all "write ups" of suicides. Second, enforce the law in regard to selling poisonous agents to minors and enact one making it harder for any one to purchase them. Third, enforce rigidly the law prohibiting the marriage of first cousins and mental defectives. Also when called into a case of melancholia or where there is any probability of self-destruction have them kept under restraint until all danger is past.

Small reddish spots interspersed over the tonsils, uvula and anterior pillars, with no signs of inflammation, are usually herpetic.—*Amer. Jour. of Surgery*.



## POST-GRADUATE WORK IN THE COUNTY SOCIETY.

(From the *Kentucky Medical Journal*,  
February, 1909.)

The voice of the past, the needs of the present and the prospects of the future unite in demanding that the physician of to-day shall be an ardent student of his science and a thoughtful practitioner of his art. Every honored name in medical history is the name of a student. The unsolved problems of to-day call for research and the researches of yesterday must be worked into the average practice of to-day. The standard of efficiency is advancing in all lines of effort and especially in medicine. As individuals we cannot maintain our standing by chance but by work.

Our higher standard of medical college education is turning out a class of doctors who are better equipped by preliminary attainments and by medical training than their predecessors. They will profit more rapidly by experience because of their better education. If the experienced doctor of to-day is not willing to be outstripped he must become an ardent student. If the weak doctor of to-day wishes to retain even a passable standing he must devote himself earnestly to study. If the newly graduated doctor means to keep step with the times he must continue to be a student. The post-graduate course of the county society offers the most ready means, and to the vast majority of doctors the only available means, of systematic study. A small minority of doctors are habitual students and give much time to textbooks, journals and to bedside observation, but most of us need some stimulus to keep us at constant study. For the first class the post-graduate course is a help; for the second it is a necessity.

The proposed outline for this course commends itself as thorough and practical. Where it has been taken up it has proven its value. The lecturers, demonstrators and essayists are the greatest gainers. Each member takes from the meeting much or little in proportion to what he takes to it in study and preparation.

To renew our college education in the light of our years of experience supplemented by the new discoveries in our art and to adapt them to local needs; to so clarify our hazy notions of our science as to be prepared to teach it; all this constitutes an opportunity for advancement that we cannot afford to neglect.

W. W. A.

## HOW TO HELP.

(From the *Kentucky Medical Journal*)

What can each of us do which will best promote the interests of our society, is a question which occurs mentally at least to every worker in every county society the country over. The answers are many and vary with the individual not only in kind, but in intensity, practicability and everything else. Of course the first requisite is constant attendance and promptitude in the performance of every duty. An efficient secretary is a sine qua non to successful society work, but no matter how efficient this officer may be he can do nothing unless he has the presence of the members and their help in the work. The program should be arranged well

in advance so ample time is given for preparation, and the essayist who has the presumption to present his views to his confreres without a thoughtful study of all the practical aspects of his subject certainly neglects an evident duty.

Some men, on the other hand, can accomplish most by entirely staying away from the society and criticising adversely all of its real or supposed proceedings. These pariahs of medicine do most harm to what they touch, and while rare it is still an existent genus. Another—a much larger—class attend the meetings but usually sit well back, or stand around the lobby. Such are usually well satisfied about their knowledge of scientific medicine and the buzz of their whispered conversation is rarely silenced, however important the subject under discussion. Their chief value, however, is to the officers and workers of the organization. These can never be satisfied with their work as long as they listen to, or hear of, the "buzzers," whose chief function is to complain of the officers. Such men are rarely officials themselves except of talking class, have little constructive and almost as little real destructive ability, but they do organizations a real service in promoting the sort of discontent which keeps every man doing his best even though he feel a contempt for his captious critics.

## ANIMAL EXPERIMENTATION ON THE OFFENSIVE.

(From the *Wisconsin Medical Journal*, December, 1908.)

According to hygienists, ours is the era of preventive medicine. But justly may the experimentalists claim this to be the era of curative medicine, and great, indeed, would be the calamity if now—on the threshold of momentous discoveries—a check to progress were encountered.

The hysterical outbursts of antagonism to animal experimentation, which, in the great majority of instances—are found to be positively without foundation so far as they refer to the infliction of pain—have led to the formation of organizations designed to prevent absolutely all animal experimentation. This opposition evidently threatens to seriously compromise the general trend of present-day scientific investigations. It has, therefore, seemed expedient to make an organized effort to combat legitimately this well meant but misguided wave of reform. Authors of scientific articles who cite results of animal experiments, are often indefinite in their language and do not mention the detailed methods of their experimentation. By neglecting this any inference may be drawn and the antis very naturally draw conclusions to fit their contention.

In order, therefore, that experimenters do not expose themselves to unjust criticism—because every inadvertence helps the anti-vivisection propaganda—a Council of Defense of Medical Research has been organized. This council has sent forth the following communication, and we commend its admirable advice to contributors to current literature:

"To the Editors of Medical Journals:

"Gentlemen—The Council on Defense of Medical Research of the American Medical Association is desirous of obviating, as completely as possible, any cause for complaint against

animal experimentation. Much of the 'evidence' cited by hostile agitators is taken from articles in journals devoted to the medical sciences. Instances are frequently cited in which it is stated that, as there is no mention of anesthetics, the work must have been done without anesthesia.

"Will you not aid the council in its efforts by very careful examination of articles submitted to you for publication, with especial reference to the use of words likely to cause misapprehension regarding the experience of the animals used for research? And in every instance in which anesthesia is a condition in the investigation, will you not point out to authors the importance of making that fact prominent? We hope that by the co-operation of all who are interested in the promotion of medical science, the development of a public opinion hostile to medical research may be checked and that there may be a growth of popular understanding of the aims, the methods, and the significance of the results of animal experimentation.

Yours sincerely,

Walter B. Cannon, Chairman."

#### ADVERTISING IN MEDICAL JOURNALS.

(From *American Medicine*, January, 1909.)

The question of advertising in medical journals is a large one and all of its various features cannot be regulated in a minute to satisfy everybody's wishes. It takes time to establish standards fair to all and to execute them in a square way without doing needless harm and injury. We do not agree with Dr. Warbasse that an official journal should have no advertisements, unless all advertisements are wrong, —in which event, no journal should accept them. The matter cannot rest here, for if all advertisements are venal, the products advertised are likewise, and the whole business of medical and pharmaceutical supplies is wrong. Surely this is the *reductio ad absurdum* and comes pretty close to the rash mistake of the Psalmist, who was admittedly altogether too hasty and generic in condemning his fellow men. No, the pharmaceutical business, the publishing business and the other enterprises that commonly advertise in medical journals, are as honest as medicine itself. They have their evils and their rotten spots, but so has medicine. The problem is to find the good and eliminate the bad, and the official journals are in an admirable position to aid in its solution. Narrow prejudices, personal ill feeling and petty antipathies will never help. Common sense, a temperate exposition of fallacies, and a scientific consideration of mistakes, will do more to overcome the real evils than all the vituperation, mud slinging and muck raking in the world. Intolerance and ill temper only substitute one evil for another. The New York State Journal of Medicine has shown neither, and we believe it has helped its readers accordingly. The Journal of the New Jersey State Medical Society is another official journal of equal balance and dignity, and there are others. All this shows that there can be no quarrel between the so-called independent journals, and the so-called official publications. Pretty much the same problems, the same difficulties and the same needs confront the journals of each class. All want to succeed, to be useful, and to avoid that which will lower standards of efficiency or

decency. Will quarrels help? Never, but they will hurt and hold us back. So for one, American Medicine is going on. It admires and respects its contemporaries for the large amount of good it finds in all of them. It is going to trudge no one, truckle to no one, fear no one. It aims to be the very best, cleanest and most useful journal its editors can possibly make it. An era of transition, of changing ideas, and shifting values is at hand. Cool heads, earnestness, dignity and journalistic balance are needed as never before. To measure up to these requirements is our aspiration.

We believe that Dr. Warbasse did—that is why we and a good many others will miss him from the field.

(Thanks for commendation of our Journal's course. EDITOR.)

#### AS TO SODIUM BENZOATE.

(From *Critic and Guide*, February, 1909.)

The newspapers of to-day (January 25) bring the report that the Referee Board of Consulting Scientific Experts, appointed by President Roosevelt, entirely disagrees with the conclusions arrived at by Dr. Wiley, as to the injuriousness of sodium benzoate.

The report is signed by President Ira Remsen, of Johns Hopkins University, chairman; Russell H. Chittenden, director of the Sheffield Scientific School of Yale University; John H. Long, professor of chemistry, Medical School, Northwestern University, and C. H. Herter, professor of physiological chemistry, College of Physicians and Surgeons, New York. The most important of the findings are:

First—Sodium benzoate in small doses (under 0.5 grams per day), mixed with the food, is without deleterious or poisonous action, and is not injurious to health.

Second—Sodium benzoate in large doses (up to 4 grams per day), mixed with the food, has not been found to exert any deleterious effect on the general health nor to act as a poison in the general acceptance of the term. In some directions there were slight modifications in certain physiological processes, the exact significance of which modifications is not known.

Third—The admixture of sodium benzoate with food in small or large doses has not been found injuriously to affect or impair the quality or nutritive value of such food.

The editor of the *Critic and Guide* has been of the few who had the temerity to disagree with those who considered Dr. Wiley either a great man or a great scientist. We expressed our opinion publicly that Dr. Wiley was only a mediocre chemist; that and nothing more, and for his experiments with the "poison squads" we have had nothing but contempt. They were not conducted in a scientific manner and the conclusions were extremely fallacious. It seemed to us more than once that there was greater anxiety on Dr. Wiley's part to make out a case than to arrive at the truth. And the crushing blow which he has received from the hands of the greatest scientists in the country will go far towards the abolition of bureaucratic domineering methods in scientific investigation.

As to our personal opinion in the matter. We believe that not only is the small amount of sodium benzoate generally used as a preserva-



tive not injurious to health, but by limiting intestinal fermentation, acting as a urinary disinfectant, etc., it may prove distinctly beneficial. And we leave out of the discussion the fact that it is better to use sound food containing a small amount of preservative, than to use unsound, decomposed food which does not contain any.

But on one point we stand firm: the label should tell the truth. If a preservative is used, let that fact be stated on the label. And let the people be the judges as to whether they care to consume food preserved chemically or not.

### **Drs. Holland and Fussell on Use of Sodium Benzoate.**

(From the North American, Philadelphia, April 23, 1909.)

Declaring that the State should not enact a law permitting the use of any food adulterant until convinced by the finding of its own experts that the substance it would legalize is not harmful to health, Dr. James W. Holland yesterday expressed, in effect, the conviction that the Murphy bill, which would legalize the use of sodium benzoate, is contrary to sound public policy.

Dr. Holland is dean of Jefferson Medical College and professor of medical chemistry and toxicology. Not alone because of his scientific attainments, but also because he has closely followed the progress of the war that has been waged to obtain the legalizing of this preservative, his carefully expressed opinion is of especial weight.

Physicians and scientists have opposed the bill for varying reasons. Some have done so because the drug is injurious to health. Others have taken the ground that, whether in itself injurious or not, it is obvious that the use of the drug would be mainly for the purpose of concealing the presence of rotten ingredients.

Still others have held that the human system should not be habituated to any drug, as the effect of the drug when taken medicinally would be lost.

Dr. Holland logically reasons that so long as it is unestablished that sodium benzoate is not harmless to the system its use in foods should not be legalized. He pointed out that Dr. Wiley has made one finding, and the referee board an opposite one, and said:

"In view of these opposing opinions, expressions by investigators who, in my judgment, are equally experienced, further evidence is necessary before I can accept the statement that benzoate of soda is a harmless constituent worthy to be incorporated in any kind of food. This question is so important that the State authorities of Pennsylvania ought to investigate in the most careful way by direct experiments, so arranged as to cover every possible objection.

"In the meantime, the proper attitude of a man of science is to suspend judgment so far as to withhold his indorsement of sodium benzoate as a constituent of food. And until such time as the question is settled beyond a reasonable doubt the use of sodium benzoate in food ought not to be legalized."

Positive opposition to the bill as it has passed the Legislature was expressed by Dr. M. Howard Fussell, assistant professor of medicine of the University of Pennsylvania.

"I want to say," said Dr. Fussell, "that my opinions on this subject are of a general nature, as I have made no special investigation. But I am firmly convinced that it is bad public policy to legalize the use, as a preservative, to be used in foods generally, of a drug which acts specifically upon certain organs of the body.

"I believe that such a drug should only be taken into the human system when there is a diseased condition to correct, and then only under the physician's advice. To take it continuously day after day surely cannot be beneficial.

"This is entirely apart from the other powerful objection to the use of the preservative which applies whether the drug itself is harmful or not. This second objection is that sodium benzoate would in all probability be used to conceal inferiority of materials. In any event, it would not work good to the consumer, and would obviously be used for a commercial purpose, and very likely to the grave injury of the consuming public."

Physicians are pointing out that the trend of sentiment in other commonwealths is that independent investigations should be made by State authorities before laws permitting use of the preservative are passed. They contrast this with the attitude of the Pennsylvania Legislature, which was to pass a law first and investigate the effects of the drug subsequently, if at all.

### **Resolutions Commend Dr. Wiley.**

The Medical Society of the District of Columbia, at its meeting, March 17, unanimously adopted resolutions setting forth the sterling integrity, courage, persistent justice and skill and accomplishments as a chemist of Dr. Harvey W. Wiley; heartily commending and endorsing his arduous and difficult work in protecting the American people from impurities and adulterations in their food, drink and medicine, and trusting that his efforts will be generously sustained by the government, supported by the cordial sympathy of his professional colleagues and encouraged by the sincere appreciation of a grateful populace.

### **BOOK REVIEW.**

"The Popes and Science." The history of the papal relations to science during the Middle Ages and down to our own time. By James J. Walsh, M. D., Ph. D., LL.D. 400 pages. \$2.00. Fordham University Press, N. Y.

This work is an able presentment of the assistance given by the papal church to the advancement of medical science and especially the science and art of surgery. The writer claims that the papal opposition to science is supposititious and based largely on an exaggeration of the significance of the Galileo incident. The facts are pleasantly stated and will repay perusal.

### **Marriages.**

MUTA-CAMP—At West Orange, N. J., April 14, 1909, Dr. Samuel A. Muta to Miss Leila M. Camp, both of West Orange.

THUM-BOSE—At Bayonne, N. J., April 19, 1903, Dr. Ernest Thum to Miss Ann Elizabeth Bose, both of Bayonne.

## Obituaries.

**FORMAN.**—At Freehold, N. J., March 29, 1909, Dr. D. McLean Forman, aged 64 years. He was born in Freehold. His early education was in the Freehold Institute; he subsequently studied with Dr. John Vought, and entered the College of Physicians and Surgeons, New York City, from which he graduated in 1866. He then spent one year each in Bellevue and St. Luke's Hospitals, New York.

In 1862, before graduating, he enlisted in the United States Navy, for the Civil War service, and was assigned to the battleship Rhode Island, as assistant surgeon; he was then but 18 years of age. He practiced in Freehold for over 35 years. For the past 15 years he was an attending surgeon to the Monmouth Memorial Hospital at Long Branch, where he successfully performed many major operations. He ranked very high in the practice of medicine and surgery, and was regarded as one of the foremost practitioners in the State.

He was a member of the Monmouth County Medical Society, of which he was secretary for thirty years; also a member of the State Medical Society of the American Medical Association and of the Practitioners' Society of Eastern Monmouth.

In 1874 he married Miss Lizzie Vanderveer, daughter of the late Dr. Jacob Vanderveer of Long Branch, who with one son and one daughter survives him.

He was an elder in the Freehold Presbyterian Church. He was also a member of the Tennent Lodge, No. 69, Knights of Pythias; the Freehold Lodge, A. O. U. W.; Keith Council, Royal Arcanum, and Red Bank Lodge, Loyal Association.

His funeral was very largely attended, a large number of physicians being present. The business places of the city were all closed during the hour of the service.

**HAGEN.**—At Newark, N. J., April 5, 1909, Dr. Charles W. Hagen, of that city.

**SOMERS.**—At Atlantic City, N. J., April 2, 1909, Dr. M. LeRoy Somers, aged 34 years. He graduated from Jefferson Medical College, Philadelphia, in 1898. He practiced in Atlantic City since graduation. He served on the Board of Health for many years, and at the time of his death was physician to said board. He was an active member of the Atlantic County Medical Society, and of the American Medical Association.

**DONOVAN.**—In Elizabeth, April 27, 1909, Dr. Alfred Q. Donovan, one of the city's older and best known physicians. He graduated from Bellevue Hospital Medical College in 1882. A fuller notice will appear in our next issue.

**MANDEVILLE.**—In Newark, N. J. April 26, 1909, Dr. Frederick A. Mandeville, in the 68th year of his age. The cause of death was nephritis. He was born in Newark, August 14, 1840.

After completing his early studies at Newark Academy, Dr. Mandeville became a student at Rutgers College. In his sophomore year at this institution Dr. Mandeville decided upon a mercantile career and entered the employ of S. R. W. Heath & Co.

Subsequently the desire to enter the medical profession returned, and he resumed the studies which enabled him to enter a medical college. He became a student at the New York Homeopathic Medical College, and was graduated in 1861. He then entered the New York Medical College and graduated in 1863.

While at the latter institution he was appointed a medical cadet, and was assigned to the Ward United States Hospital, in Newark. After a short time he was promoted to be acting assistant surgeon, being associated in his work with Dr. Edward Janeway.

Beginning private practice, Dr. Mandeville was associated for one year with Dr. Charles R. Fish. He practised for about two years in Washington street, and then removed to 940 Broad street, where his office remained more than forty years.

In 1869 Dr. Mandeville was tendered the chair of diseases of children and hygiene at the New York Homeopathic College, but declined to assume permanently the duties attendant upon that position. He accepted an honorary appointment and lectured at the institution for one year.

He was for nine years a member of the Board of Education; was elected a member of the Board of Health in 1882; was twice its president, and health officer for five years.

**WHITE.**—At Camden, N. J., March 23, 1909, Dr. J. Orlando White, in the 64th year of his age, after several months of invalidism, from angina pectoris.

Dr. White was born in Atlantic County, May 4, 1845, studied medicine with Dr. Richard M. Cooper, of Camden, and was the only student the doctor received in his office. The next year he entered the Medical Department of the University of Pennsylvania, from which he graduated in 1868, and immediately engaged in the practice of his profession.

A special meeting of the Camden County Medical Society was held on March 26, 1909, to take action upon his death, at which the following report was presented:

"This society having heard of the death of Dr. J. Orlando White, we, the members of the society, extend our heartfelt sympathy to his family for the loss they have sustained, and at the same time express the sense of loss that our society has met with in the death of one of its oldest members. Dr. White, during his active career in the medical profession, was one of the most energetic members of the society, and rendered valuable service in advancing the interests of our organization, serving as its secretary and president after his election as member in 1868; also taking an active part in the City Dispensary and serving as one of the attending physicians. He also was a member of both the State Medical Society and the American Medical Association. About the year 1885 he relinquished practice and active work in the medical profession and engaged in other business pursuits.

"Dr. White was elected an honorary member of this society after his retirement from active membership, and always expressed a deep interest in its work and of the medical profession at large."

H. Genet Taylor, Alex. Marcy, William H. Iszard, Alex. McAlister, committee.



## Personals.

**Dr. Henry D. Abbott**, of Bayonne, has recently been appointed medical inspector of the Bayonne public schools.

**Dr. E. L. B. Godfrey**, of Camden, who has been spending the winter in California, with his wife, expects to return to his Camden home about the middle of May.

**Dr. Lester H. Hummel**, of Salem, was recently appointed by the City Council as a member of the Board of Education.

**Dr. Edward J. Ill**, of Newark, has been spending a few weeks abroad.

**Dr. J. Watson Martindale**, of Camden, has been appointed instructor in surgery in the Medical Department of the Temple University, Philadelphia, Pa.

**Dr. Louis C. Osmun**, of Hackettstown, has been enjoying an automobile tour in Pennsylvania.

**Dr. Ferdinand E. Riva**, of New Brunswick, we regret to say, has been suffering from an attack of otitis media.

**Dr. George L. Romine**, of Lambertville, recently enjoyed a trip to the Isthmus of Panama.

## BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS OF THE STATE OF NEW JERSEY.

### Monthly Statement of Mortality, March, 1909.

During the month ending March 15, 1909, 2,992 deaths were reported to the Bureau of Vital Statistics, a decrease of 285 from the previous month, and 276 less than the corresponding period last year. The number of deaths from certain selected diseases for the month of March for the past three years are as follows:

	1907.	1908.	1909.
Tuberculosis of lungs....	348	344	325
Pneumonia .....	413	392	346
Other diseases of respiratory system .....	241	265	248

The number of deaths of children under one year of age was 542, over one year and under five years, 278, and persons sixty years and over, 966. The following paragraph shows the number of certificates of death received in the State Bureau of Vital Statistics during the month ending March 15, 1909, compared with the average for the previous twelve months:

Typhoid fever, 21 (30); measles, 26 (18); scarlet fever, 29 (32); whooping cough, 18 (19); diphtheria, 65 (45); malarial fever, 1 (2); tuberculosis of lungs, 325 (294); tuberculosis of other organs, 51 (52); cancer, 130 (130); cerebro spinal meningitis, 31 (26); diseases of nervous system, 318 (340); diseases of circulatory system, 375 (320); diseases of respiratory system (pneumonia and tuberculosis excepted), 248 (174); pneumonia, 346 (232); infantile diarrhoea, 47 (220); diseases of digestive system (infantile diarrhoea excepted), 154 (194); Bright's disease, 239 (197); suicide, 30 (38); all other diseases or causes of death, 538 (591); total, 2,992 (2,963).

### Laboratory of Hygiene, Div. of Food and Drugs.

During the month ending March 31, 1909, 900 samples of food and drugs were examined in the State Laboratory of Hygiene. All samples of following were up to standard: Chocolate,

cocoa, coffee, cream, honey, maple sugar and syrup, corn starch, vanilla extract, sausage, alcohol, borax, cream tartar and witch hazel. The following were below standard: 23 of 311 samples of milk; butter, 10 of 30; 2 of powdered chocolate; 7 of 21 of lemon extract; 1 of 13 of oleomargarine; 5 of 36 of cider vinegar; 4 of 13 of lime water; 5 of 7 of tincture of opium; spices, 10 of the 301 samples.

Twenty-two suits have been instituted in cases of adulteration of following: Milk 11; butter, 7; 1 each of ground cinnamon, ground mustard, oleomargarine and black pepper.

### Division of Creameries and Dairies.

County.	Dairies: Number inspected.	— Perfect mark — Above 60 P.C.	Below 60 P. C.
Bergen .....	2	1	1
Essex .....	4	2	2
Hudson (Jersey City limits).....	47	6	41
Hunterdon .....	33	13	20
Mercer .....	7	7	0
Somerset .....	1	0	1
Sussex .....	16	8	8
Warren .....	16	8	8

Total number of dairies inspected, 126; number to which letters were sent, 88; number of water samples collected from dairy premises, 38; number of creamery reinspections, 4; number of water samples collected from creamery premises, 3.

During the month ending March 31, 1909, 103 inspections were made in 67 cities and towns.

The following articles were inspected during the month, but no samples were taken: Milk, 671; butter, 642; foods, 1,656; drugs, 598. Other inspections were made as follows: Milk cans, 942; milk wagons, 359; milk depots, 40; grocery stores, 362; drug stores, 59.

### Bacteriological Department.

Specimens for bacteriological diagnosis: From suspected cases of diphtheria, 684; tuberculosis, 426; typhoid fever, 131; malaria, 7; miscellaneous, 28; total, 1,276.

### Division of Sewerage and Water Supplies.

Total number of samples analyzed in the laboratory, 158, as follows: Public water supplies, 49; private wells, 30; dairy wells, 40; creamery supplies, 3; State institution supplies, 9; sewage samples, 27.

### Inspections.

Public water supplies were inspected at Belvidere, New Brunswick, Westville, Helmetta, Pennington, Dunellen, Manasquan.

Private supplies inspected at Mount Holly, Englewood.

State institution supplies inspected at Glen Gardner, Skillman, Rahway.

Sewage plans inspected at Plainfield, Princeton, Glen Gardner, Burlington, Ridgewood, Essex Fells, Red Bank, Vineland, Freehold, Point Pleasant, Newton, Collingswood, Haddonfield, Flemington, Moorestown, Woodstown.

Special inspections at Skillman, Atlantic City, Rahway, Pennington, Maurice River, Bivalve, New Brunswick, Burlington.

Stream inspections continuing on Delaware, Shrewsbury and Raritan rivers, Lawrence Brook and their tributaries.

Number of persons summoned before the board, 17.











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